



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the SS586 Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods.

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SECTION 1: Identification

1.1. Product identifier

3M™ Fire Barrier Water Tight Sealant 1000 NS

1.2. Recommended use and restrictions on use

Recommended use

Fire Protection, This product is a watertight sealant that will help control the spread of fire, smoke and noxious gases.

1.3. Supplier's details

Address: 3M Technologies (S) Pte Ltd, 10 Ang Mo Kio Street 65, Singapore 569059
Telephone: +65 6450 8888
Website: www.3m.com.sg

1.4. Emergency telephone number

+65 6591 6601 (8.15am - 5.00pm, Monday - Friday)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Serious Eye Damage/Irritation: Category 2.

Skin Sensitizer: Category 1.

Carcinogenicity: Category 1B.

2.2. Label elements

SIGNAL WORD

DANGER!

Symbols

Exclamation mark | Health Hazard |

Pictograms



HAZARD STATEMENTS

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H350	May cause cancer.

PRECAUTIONARY STATEMENTS

Prevention:

P201	Obtain special instructions before use.
P280K	Wear protective gloves and respiratory protection.

Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Storage:

P405	Store locked up.
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Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.
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2.3. Other hazards

Persons previously sensitised to amines may develop a cross-sensitisation reaction to certain other amines. This product may release methyl ethyl ketoxime (CAS 96-29-7) during curing and/or when exposed to water or humid air.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Calcium Carbonate	1317-65-3	15 - 40
Poly(Dimethylsiloxane)	63148-62-9	15 - 40
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	70131-67-8	15 - 40
Ketoxime Silane	22984-54-9	3 - 7
Silane, trimethoxyoctyl-, hydrolysis products with silica	7631-86-9	0.5 - 5
Pigments	Mixture	1 - 2
Methyl ethyl ketone oxime	96-29-7	0.01 - 1.2
N-(3-(trimethoxysilyl)propyl)ethylenediamine	1760-24-3	< 1
Octamethylcyclotetrasiloxane	556-67-2	< 0.1

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. If you feel unwell, get medical attention.

Skin contact

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get

medical attention.

Eye contact

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If swallowed

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Allergic skin reaction (redness, swelling, blistering, and itching). Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures**5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products**Substance**

Formaldehyde

Carbon monoxide.

Carbon dioxide.

Oxides of nitrogen.

Condition

During combustion.

During combustion.

During combustion.

During combustion.

5.3. Special protective actions for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (eg. gloves, respirators...) as required.

7.2. Conditions for safe storage including any incompatibilities

Store away from acids. Store away from strong bases. Store away from oxidising agents.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Calcium Carbonate	1317-65-3	Singapore PELs	TWA(8 hours):10 mg/m3	
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	1317-65-3	ACGIH	TWA(inhalable particulates):10 mg/m3	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	1317-65-3	ACGIH	TWA(respirable particles):3 mg/m3	
Octamethylcyclotetrasiloxane	556-67-2	AIHA	TWA:10 ppm	
DUST, INERT OR NUISANCE	7631-86-9	Singapore PELs	TWA(as particulate)(8 hours):10 mg/m3	
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	7631-86-9	ACGIH	TWA(inhalable particulates):10 mg/m3	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	7631-86-9	ACGIH	TWA(respirable particles):3 mg/m3	
Methyl ethyl ketone oxime	96-29-7	AIHA	TWA:36 mg/m3(10 ppm)	Dermal Sensitizer

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

Singapore PELs : Singapore. Workplace Safety and Health (Permissible Exposure Levels of Toxic Substances) Order

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety glasses with side shields.

Indirect vented goggles.

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the

results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid.
Specific Physical Form:	Paste
Color	Gray
Odor	Low Silicone
Odour threshold	<i>No data available.</i>
pH	<i>No data available.</i>
Melting point/Freezing point	<i>No data available.</i>
Boiling point/Initial boiling point/Boiling range	<i>Not applicable.</i>
Flash point	> 100 °C [Test Method: Closed Cup]
Evaporation rate	<i>Not applicable.</i>
Flammability	Not applicable.
Flammable Limits(LEL)	<i>Not applicable.</i>
Flammable Limits(UEL)	<i>Not applicable.</i>
Vapour pressure	< 666.6 Pa [@ 25 °C]
Vapor Density and/or Relative Vapor Density	>=1 [Ref Std: AIR=1]
Density	1.32 g/cm3
Relative density	1.31 - 1.33 [Ref Std: WATER=1]
Water solubility	Nil
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Autoignition temperature	<i>No data available.</i>
Decomposition temperature	<i>No data available.</i>
Kinematic Viscosity	<i>No data available.</i>
Volatile organic compounds (VOC)	<=4 % weight [Test Method: tested per EPA method 24]
VOC less H2O & exempt solvents	<=53 g/l [Test Method: tested per EPA method 24]
Molecular weight	<i>No data available.</i>

Particle Characteristics	<i>Not applicable.</i>
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SECTION 10: Stability and reactivity

10.1 Reactivity

This material is considered to be non reactive under normal use conditions

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Not determined

10.5 Incompatible materials

Strong acids.

Strong bases.

Strong oxidising agents.

10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:**Prolonged or repeated exposure may cause target organ effects:**

Hematopoietic effects: Signs/symptoms may include generalised weakness, fatigue and alterations in numbers of circulating blood cells. Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Additional information:

Persons previously sensitised to amines may develop a cross-sensitisation reaction to certain other amines.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Calcium Carbonate	Dermal	Rat	LD50 > 2,000 mg/kg
Calcium Carbonate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3 mg/l
Calcium Carbonate	Ingestion	Rat	LD50 6,450 mg/kg
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	Dermal	Rabbit	LD50 > 16,000 mg/kg
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	Ingestion	Rat	LD50 > 64,000 mg/kg
Poly(Dimethylsiloxane)	Dermal	Rabbit	LD50 > 19,400 mg/kg
Poly(Dimethylsiloxane)	Ingestion	Rat	LD50 > 17,000 mg/kg
Silane, trimethoxyoctyl-, hydrolysis products with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silane, trimethoxyoctyl-, hydrolysis products with silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Silane, trimethoxyoctyl-, hydrolysis products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
Ketoxime Silane	Dermal	Rat	LD50 > 2,000 mg/kg
Ketoxime Silane	Ingestion	Rat	LD50 2,260 mg/kg
Methyl ethyl ketone oxime	Dermal	official classification	LD50 1,100 mg/kg
Methyl ethyl ketone oxime	Ingestion	official classification	LD50 100 mg/kg
Methyl ethyl ketone oxime	Inhalation-Vapor	Rat	LC50 estimated to be 20 - 50 mg/l
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Dermal	Rabbit	LD50 > 2,000 mg/kg
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Inhalation-Dust/Mist (4 hours)	Rat	LC50 >1.49, <2.44 mg/l
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Ingestion	Rat	LD50 1,897 mg/kg
Octamethylcyclotetrasiloxane	Dermal	Rat	LD50 > 2,400 mg/kg
Octamethylcyclotetrasiloxane	Inhalation-Dust/Mist (4 hours)	Rat	LC50 36 mg/l
Octamethylcyclotetrasiloxane	Ingestion	Rat	LD50 > 4,800 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Calcium Carbonate	Rabbit	No significant irritation
Poly(Dimethylsiloxane)	Rabbit	No significant irritation
Silane, trimethoxyoctyl-, hydrolysis products with silica	Rabbit	No significant irritation
Ketoxime Silane	Rabbit	No significant irritation
Methyl ethyl ketone oxime	Rabbit	Irritant
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Rabbit	Mild irritant
Octamethylcyclotetrasiloxane	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Calcium Carbonate	Rabbit	No significant irritation
Poly(Dimethylsiloxane)	Rabbit	No significant irritation
Silane, trimethoxyoctyl-, hydrolysis products with silica	Rabbit	No significant irritation
Ketoxime Silane	Rabbit	Moderate irritant
Methyl ethyl ketone oxime	Rabbit	Corrosive
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Rabbit	Corrosive
Octamethylcyclotetrasiloxane	Rabbit	No significant irritation

Sensitization:**Skin Sensitisation**

Name	Species	Value
Silane, trimethoxyoctyl-, hydrolysis products with silica	Human and animal	Not classified
Ketoxime Silane	Guinea pig	Sensitising
Methyl ethyl ketone oxime	Guinea pig	Sensitising
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Multiple animal species	Sensitising
Octamethylcyclotetrasiloxane	Human and animal	Not classified

Respiratory Sensitisation

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	In Vitro	Not mutagenic
Silane, trimethoxyoctyl-, hydrolysis products with silica	In Vitro	Not mutagenic
Ketoxime Silane	In Vitro	Not mutagenic
Methyl ethyl ketone oxime	In Vitro	Not mutagenic
Methyl ethyl ketone oxime	In vivo	Not mutagenic
N-(3-(trimethoxysilyl)propyl)ethylenediamine	In Vitro	Not mutagenic
N-(3-(trimethoxysilyl)propyl)ethylenediamine	In vivo	Not mutagenic
Octamethylcyclotetrasiloxane	In vivo	Not mutagenic
Octamethylcyclotetrasiloxane	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Silane, trimethoxyoctyl-, hydrolysis products with silica	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification

Methyl ethyl ketone oxime	Inhalation	Multiple animal species	Carcinogenic.
Octamethylcyclotetrasiloxane	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Calcium Carbonate	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	premating & during gestation
Silane, trimethoxyoctyl-, hydrolysis products with silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silane, trimethoxyoctyl-, hydrolysis products with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silane, trimethoxyoctyl-, hydrolysis products with silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Ketoxime Silane	Ingestion	Not classified for female reproduction	Rat	NOAEL 250 mg/kg/day	premating into lactation
Ketoxime Silane	Ingestion	Not classified for male reproduction	Rat	NOAEL 250 mg/kg/day	28 days
Ketoxime Silane	Ingestion	Not classified for development	Rat	NOAEL 250 mg/kg/day	premating into lactation
Methyl ethyl ketone oxime	Ingestion	Not classified for female reproduction	Rat	NOAEL 200 mg/kg/day	2 generation
Methyl ethyl ketone oxime	Ingestion	Not classified for male reproduction	Rat	NOAEL 200 mg/kg/day	2 generation
Methyl ethyl ketone oxime	Ingestion	Not classified for development	Rat	NOAEL 600 mg/kg/day	during organogenesis
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Ingestion	Not classified for female reproduction	Rat	NOAEL 500 mg/kg/day	premating into lactation
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	28 days
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	during gestation
Octamethylcyclotetrasiloxane	Inhalation	Not classified for male reproduction	Rat	NOAEL 8.5 mg/l	2 generation
Octamethylcyclotetrasiloxane	Inhalation	Not classified for development	Rabbit	NOAEL 6 mg/l	during organogenesis
Octamethylcyclotetrasiloxane	Ingestion	Not classified for development	Rabbit	NOAEL 100 mg/kg	during organogenesis
Octamethylcyclotetrasiloxane	Inhalation	Toxic to female reproduction	Rat	NOAEL 3.6 mg/l	2 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes
Ketoxime Silane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Methyl ethyl ketone oxime	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Methyl ethyl ketone oxime	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	NOAEL 100 mg/kg	
N-(3-(trimethoxysilyl)propyl)eth	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	similar health	NOAEL Not available	

ylenediamine			classification	hazards		
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Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Silane, trimethoxyoctyl-, hydrolysis products with silica	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Ketoxime Silane	Ingestion	hematopoietic system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 10 mg/kg/day	28 days
Ketoxime Silane	Ingestion	endocrine system liver nervous system kidney and/or bladder	Not classified	Rat	NOAEL 250 mg/kg/day	28 days
Methyl ethyl ketone oxime	Inhalation	hematopoietic system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 0.36 mg/l	28 days
Methyl ethyl ketone oxime	Inhalation	respiratory system	May cause damage to organs though prolonged or repeated exposure	Mouse	NOAEL 0.01 mg/l	90 days
Methyl ethyl ketone oxime	Inhalation	liver	Not classified	Rat	NOAEL 1.44 mg/l	28 days
Methyl ethyl ketone oxime	Ingestion	hematopoietic system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 25 mg/kg/day	90 days
Methyl ethyl ketone oxime	Ingestion	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 100 mg/kg/day	90 days
Methyl ethyl ketone oxime	Ingestion	nervous system	Not classified	Rat	NOAEL 400 mg/kg/day	90 days
Methyl ethyl ketone oxime	Ingestion	liver kidney and/or bladder heart endocrine system bone, teeth, nails, and/or hair immune system	Not classified	Rat	NOAEL 335 mg/kg/day	90 days
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Dermal	skin endocrine system hematopoietic system kidney and/or bladder	Not classified	Rat	NOAEL 1,545 mg/kg/day	11 days
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Inhalation	respiratory system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 0.015 mg/l	90 days
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Inhalation	hematopoietic system eyes kidney and/or bladder	Not classified	Rat	NOAEL 0.044 mg/l	90 days
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Ingestion	hematopoietic system nervous system	Not classified	Rat	NOAEL 500 mg/kg/day	28 days
Octamethylcyclotetrasiloxane	Dermal	hematopoietic system	Not classified	Rabbit	NOAEL 960 mg/kg/day	3 weeks
Octamethylcyclotetrasiloxane	Inhalation	liver	Not classified	Rat	NOAEL 8.5 mg/l	13 weeks
Octamethylcyclotetrasiloxane	Inhalation	endocrine system immune system kidney and/or bladder	Not classified	Rat	NOAEL 8.5 mg/l	2 generation
Octamethylcyclotetrasiloxane	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 8.5 mg/l	13 weeks
Octamethylcyclotetrasiloxane	Ingestion	liver	Not classified	Rat	NOAEL 1,600 mg/kg/day	2 weeks

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity**Acute aquatic hazard:**

Not acutely toxic to aquatic life by GHS criteria.

Chronic aquatic hazard:

GHS Chronic 3: Harmful to aquatic life with long lasting effects.

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Calcium Carbonate	1317-65-3	Green algae	Estimated	72 hours	EC50	>100 mg/l
Calcium Carbonate	1317-65-3	Rainbow trout	Estimated	96 hours	LC50	>100 mg/l
Calcium Carbonate	1317-65-3	Water flea	Estimated	48 hours	EC50	>100 mg/l
Calcium Carbonate	1317-65-3	Green algae	Estimated	72 hours	EC10	>100 mg/l
Poly(Dimethylsiloxane)	63148-62-9	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	70131-67-8	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Ketoxime Silane	22984-54-9	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Ketoxime Silane	22984-54-9	Green algae	Experimental	72 hours	EC50	94 mg/l
Ketoxime Silane	22984-54-9	Rainbow trout	Experimental	96 hours	LC50	>120 mg/l
Ketoxime Silane	22984-54-9	Water flea	Experimental	48 hours	EC50	>120 mg/l
Ketoxime Silane	22984-54-9	Water flea	Analogous Compound	21 days	NOEC	100 mg/l
Ketoxime Silane	22984-54-9	Green algae	Experimental	72 hours	NOEC	30 mg/l
Silane, trimethoxyoctyl-, hydrolysis products with silica	7631-86-9	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Methyl ethyl ketone oxime	96-29-7	Bacteria	Experimental	17 hours	EC50	281 mg/l
Methyl ethyl ketone oxime	96-29-7	Green algae	Experimental	72 hours	EC50	16 mg/l
Methyl ethyl ketone oxime	96-29-7	Medaka	Experimental	96 hours	LC50	>100 mg/l
Methyl ethyl ketone oxime	96-29-7	Water flea	Experimental	48 hours	EC50	201 mg/l
Methyl ethyl ketone oxime	96-29-7	Green algae	Experimental	72 hours	NOEC	2.6 mg/l
Methyl ethyl ketone oxime	96-29-7	Water flea	Experimental	21 days	NOEC	>=100 mg/l
N-(3-	1760-24-3	Bacteria	Experimental	16 hours	EC50	67 mg/l

(trimethoxysilyl)propyl)ethylenediamine						
N-(3-(trimethoxysilyl)propyl)ethylenediamine	1760-24-3	Fathead minnow	Experimental	96 hours	LC50	168 mg/l
N-(3-(trimethoxysilyl)propyl)ethylenediamine	1760-24-3	Green algae	Experimental	72 hours	ErC50	8.8 mg/l
N-(3-(trimethoxysilyl)propyl)ethylenediamine	1760-24-3	Water flea	Experimental	48 hours	EC50	81 mg/l
N-(3-(trimethoxysilyl)propyl)ethylenediamine	1760-24-3	Green algae	Experimental	72 hours	NOEC	3.1 mg/l
Octamethylcyclotetrasiloxane	556-67-2	Blackworm	Experimental	28 days	NOEC	0.73 mg/kg (Dry Weight)
Octamethylcyclotetrasiloxane	556-67-2	Midge	Experimental	14 days	LC50	>170 mg/kg (Dry Weight)
Octamethylcyclotetrasiloxane	556-67-2	Mysid Shrimp	Experimental	96 hours	LC50	>0.0091 mg/l
Octamethylcyclotetrasiloxane	556-67-2	Rainbow trout	Experimental	96 hours	LC50	>0.022 mg/l
Octamethylcyclotetrasiloxane	556-67-2	Water flea	Experimental	48 hours	EC50	>0.015 mg/l
Octamethylcyclotetrasiloxane	556-67-2	Rainbow trout	Experimental	93 days	NOEC	0.0044 mg/l
Octamethylcyclotetrasiloxane	556-67-2	Water flea	Experimental	21 days	NOEC	0.015 mg/l
Octamethylcyclotetrasiloxane	556-67-2	Activated sludge	Experimental	3 hours	EC50	>10,000 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Calcium Carbonate	1317-65-3	Data not available-insufficient	N/A	N/A	N/A	N/A
Poly(Dimethylsiloxane)	63148-62-9	Data not available-insufficient	N/A	N/A	N/A	N/A
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	70131-67-8	Data not available-insufficient	N/A	N/A	N/A	N/A
Ketoxime Silane	22984-54-9	Analogous Compound Biodegradation	28 days	Dissolv. Organic Carbon Deplet	0 %removal of DOC	OECD 301A - DOC Die Away Test
Ketoxime Silane	22984-54-9	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	1 minutes (t 1/2)	
Silane, trimethoxyoctyl-, hydrolysis products with silica	7631-86-9	Data not available-insufficient	N/A	N/A	N/A	N/A
Methyl ethyl ketone oxime	96-29-7	Experimental Biodegradation	21 days	BOD	14.5 %BOD/ThOD	
Methyl ethyl ketone oxime	96-29-7	Estimated Photolysis		Photolytic half-life (in air)	21.6 days (t 1/2)	
Methyl ethyl	96-29-7	Experimental		Hydrolytic half-life	18 days (t 1/2)	

3M™ Fire Barrier Water Tight Sealant 1000 NS

ketone oxime		Hydrolysis				
N-(3-(trimethoxysilyl)propyl)ethylenediamine	1760-24-3	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	39 %removal of DOC	EC C.4.A. DOC Die-Away Test
N-(3-(trimethoxysilyl)propyl)ethylenediamine	1760-24-3	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	1.5 minutes (t 1/2)	
Octamethylcyclotetrasiloxane	556-67-2	Experimental Biodegradation	29 days	CO2 evolution	3.7 %CO2 evolution/THCO2 evolution	OECD 310 CO2 Headspace
Octamethylcyclotetrasiloxane	556-67-2	Experimental Photolysis		Photolytic half-life (in air)	31 days (t 1/2)	
Octamethylcyclotetrasiloxane	556-67-2	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	69.3-144 hours (t 1/2)	OECD 111 Hydrolysis func of pH

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Calcium Carbonate	1317-65-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Poly(Dimethylsiloxane)	63148-62-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	70131-67-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Ketoxime Silane	22984-54-9	Analogous Compound Bioconcentration		Log Kow	<0.65	
Silane, trimethoxyoctyl-, hydrolysis products with silica	7631-86-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Methyl ethyl ketone oxime	96-29-7	Experimental BCF - Fish	42 days	Bioaccumulation factor	<5.8	OECD305-Bioconcentration
N-(3-(trimethoxysilyl)propyl)ethylenediamine	1760-24-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Octamethylcyclotetrasiloxane	556-67-2	Experimental BCF - Fish	28 days	Bioaccumulation factor	12400	40CFR 797.1520-Fish Bioaccumm
Octamethylcyclotetrasiloxane	556-67-2	Experimental Bioconcentration		Log Kow	6.49	OECD 123 log Kow slow stir

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes

unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

International Regulations

UN No.: Not restricted for transport.

UN Proper shipping name: Not restricted for transport.

Transportation Class (IMO): None assigned

Transportation Class (IATA): None assigned

Other Dangerous Goods Descriptions (IMO): None assigned

Other Dangerous Goods Descriptions (IATA): None assigned

Packing Group: None assigned

Marine pollutant: None assigned

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

This product may contain component(s) that are regulated by the following:

Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations: this product is subject to SDS, labelling, PEL and other requirements in the Act/Regulations.

SECTION 16: Other information

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

3M Singapore SDSs are available at www.3m.com.sg

Firestop Self Leveling Silicone Sealant CFS-S SIL SL

Product description

- Self-leveling, single-component, silicone-based firestop sealant for use with through-penetrations as well as construction joints in floors.

Product features

- Self-leveling—requires no tooling
- Excellent elongation/compression properties
- Meets 500 cycle requirements (ASTM E 1966 and UL 2079)
- Smoke, fume, water and UV resistant
- Meets Class I W-rating requirements
- Meets LEED™ requirements for indoor environmental quality credit 4.1 Low Emitting Materials, Sealants and Adhesives and 4.2 Paints and Coatings

Areas of application

- Sealing construction/expansion joints
- Metal pipes
- Cable bundles
- Sealing multiple penetrations in small or large openings

For use with

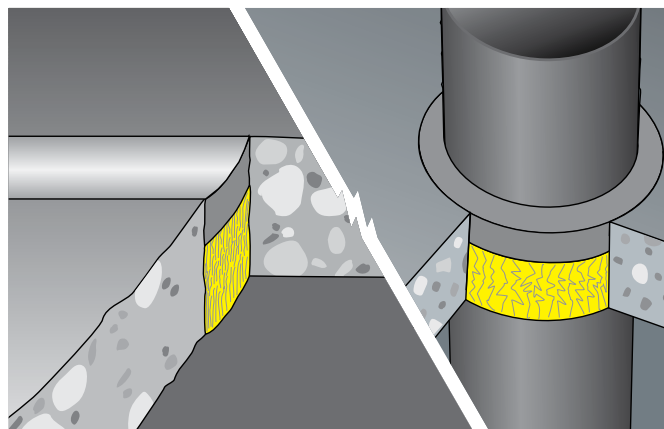
- Concrete floors rated up to 4 hours

Examples

- Penetrations for metal pipes between floor levels
- Construction joints and expansion joints in floors

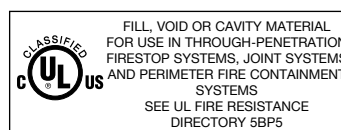
Installation instructions

- Refer to what is included in the package, the MSDS, and the applicable listing.



Technical Data*	CFS-S SIL SL
Chemical basis	Neutral elastic silicone
Density	Approx. 1.4 g/cm ³
Color	Gray
Application temperature	40°F to 104°F (5°C to 40°C)
Skin forming time	Approx. 15 min
Curing time	Approx. 2 mm/3 days
Volume shrinkage	Approx. 0 – 5%
Joint movement capability (UL 2079)	Approx. 33%
Temperature resistance	–40°F to 300°F (–40°C to 149°C)
Surface burning characteristics (ASTM E 84-12)	Flame Spread: 0 Smoke Development: 50
Sound transmission classification (ASTM E 90-09)	53 (Relates to specific construction)
Tested in accordance with	UL 1479 ASTM E 1966 UL 2079 ASTM E 814 ASTM E 2307 ASTM E 84 ASTM G21

*At 73°F (23°C) and 50% relative humidity



Hilti Firestop
Saving lives
through innovation
and education

Hilti. Outperform. Outlast.

Hilti, Inc. (U.S.) 1-800-879-8000 www.us.hilti.com • www.us.hilti.com/firestop • en español 1-800-879-5000

SAFETY DATA SHEET

Section 1 - Chemical Product and Company Information

Product Name: 1201B Red Enamel **Product Code:** 1201B

Trade Name: Glyptal

Manufactured by:

GLYPTAL, INC.
305 Eastern Ave.
Chelsea, MA 02150
Telephone (617) 884-6918

IN CASE OF EMERGENCY:

CHEMTREC 1-800-424-9300

Product Use: Coatings

Not recommended for: Nonindustrial Use

Section 2 - Hazards Identification

NFPA Ratings, risk phrases, and suggested WHMIS Hazard Categories:

GHS Ratings:

Flammable liquid	3	Flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$ (140°F)
Dermal Toxicity	4	Dermal >1000 and ≤ 2000 mg/kg
Inhalation Toxicity	4	Gases >2500 and ≤ 20000 ppm, Vapors >10 and ≤ 20 mg/l, Dusts & mists >1 and ≤ 5 mg/l
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: ≥ 2.3 < 4.0 or persistent inflammation
Eye corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 days
Carcinogen	2	Limited evidence of human or animal carcinogenicity
Organ toxin single exposure	3	Transient target organ effects- Narcotic effects- Respiratory tract irritation
Aspiration hazard	1	Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity $< \text{or} = 20.5$ mm ² /s at 40°C .
Acute aquatic toxicity	C3	

GHS Hazards

H226	Flammable liquid and vapour
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H402	Harmful to aquatic life

GHS Precautions

P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces - No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/light/.../equipment
P242	Use only non-sparking tools

P243	Take precautionary measures against static discharge
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash skin thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P331	Do NOT induce vomiting
P362	Take off contaminated clothing and wash before reuse
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P312	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P332+P313	If skin irritation occurs: Get medical advice/attention
P337+P313	If eye irritation persists, get medical advice/attention
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
P403+P233	Store in a well ventilated place. Keep container tightly closed
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container to an approved waste disposal plant

Signal Word: Danger



Section 3 - Composition/Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Xylene (mixed isomers)	1330-20-7	20.00% - 30.00%
Aliphatic Petroleum Distillates	64742-89-8	1.00% - 5.00%
Ethylbenzene	100-41-4	1.00% - 5.00%

Section 4 - First Aid Measures

INHALATION - Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room, or physician as further medical treatment may be necessary. Administer oxygen if a qualified operator is available.

EYE CONTACT - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. If irritation persists, contact a poison control center, emergency room, or physician as further medical treatment may be necessary.

SKIN CONTACT - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water. If symptoms persist, contact a poison control center, emergency room, or physician as further medical treatment may be necessary.

INGESTION - If material is ingested, seek immediate medical attention. Do not induce vomiting. If vomiting occurs

spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs . Contact a poison control center, emergency room, or physician as further medical treatment will be necessary .

Section 5 - Fire Fighting Measures

Flash Point: 29 °C (84 °F)

LEL: 1.00

UEL: 7.00

EXTINGUISHING MEDIA: Use carbon dioxide (CO₂), "alcohol" foam, dry chemical

UNUSUAL FIRE OR EXPLOSION HAZARDS: The product vapor is heavier than air and may travel a considerable distance to a source of ignition and flashback. Closed containers may explode or burst when exposed to extreme heat. May produce hazardous decomposition products when exposed to extreme heat.

HAZARDOUS COMBUSTION PRODUCTS: See section 10 for a list of hazardous decomposition products for this mixture.

FIRE FIGHTING: Water spray may be ineffectve. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If evacuation of personnel is necessary, evacuate to an upwind area . Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.

FIRE FIGHTING EQUIPMENT: Firemen and emergency responders: wear full turnout gear or Level A equipment, including positive-pressure, self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

SPILL AND LEAK PROCEDURES: Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

SMALL SPILLS: Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

LARGE SPILLS: Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas .

Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Label the waste container. Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

Section 7 - Handling and Storage

HANDLING PRECAUTIONS: Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 50 to 85 °F (10 to 30 °C).

STORAGE: Prevent from freezing. Do not store above 95 °F (35 °C).

Store only in original containers.

Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Xylene (mixed isomers) 1330-20-7	PEL 100 ppm - TWA PEL 150 ppm - STEL	TLV 100 ppm - TWA TLV 150 ppm - STEL	Not Established
Aliphatic Petroleum Distillates 64742-89-8	TWA: 500 ppm / 2000 mg/m3 (Z-1) TWA: 400 ppm / 1600 mg/m3 (p0)	TWA: 300 ppm	Not Established
Ethylbenzene 100-41-4	STEL - 125 ppm (Z-1) TWA - 100 ppm (Z-1)	STEL - 125 ppm TLV TWA - 20 ppm TLV	Not Established

ENGINEERING: Provide general dilution of local exhaust ventilation in volume and pattern to keep concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace. Use explosion-proof equipment and good manufacturing practice.

VENTILATION: Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits. Refer to OSHA standards 1910.94, 1910.107, 1910.108.

PERSONAL PROTECTIVE EQUIPMENT

EYES:

Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

PROTECTIVE GLOVES:

Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear. If necessary, wear a chemical-resistant,

butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

RESPIRATORY PROTECTION:

Respiratory protection may not be needed if the local exhaust is sufficient to maintain levels of hazardous ingredients below occupational exposure limits. Where ventilation is inadequate, use a NIOSH/MSHA-approved, air-purifying respirator equipped with the appropriate chemical cartridges or positive-pressure, air-supplied respirator. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.

CONTAMINATED EQUIPMENT: Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Appearance Red Liquid	Odor Solvent odor
Physical State Liquid	Vapor Density Heavier than air
Vapor Pressure 7.5 mm Hg @ 60 F	Evaporation Rate Slower than ether
Boiling Range 116 to 144 °C	Specific Gravity (SG) 1.441
Lbs VOC/Gallon Solids 6.5	Lbs VOC/Gallon Less Water and Exempt Solvent 3.43

Section 10 - Stability and Reactivity

Stability:

STABLE

Components of this mixture are incompatible with the following materials:

Strong oxidizing agents

This mixture is likely to exhibit the following combustion products:

Carbon Dioxide, Carbon Monoxide

Hazardous polymerization will not occur.

Section 11 - Toxicological Information

Component Toxicity

1330-20-7	Xylene (mixed isomers) Oral LD50: 4,300 mg/kg (Rat) Dermal LD50: 2,000 mg/kg (Rabbit)
64742-89-8	Aliphatic Petroleum Distillates Oral LD50: 5,000 mg/kg (Rat) Dermal LD50: 2,000 mg/kg (Rabbit)
100-41-4	Ethylbenzene Oral LD50: 3,500 mg/kg (Rat) Inhalation LC50: 17 mg/L (Rat)

Toxicological information: The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 3 and 15 for details.

Routes of Entry:

Inhalation Skin Contact Eye Contact

Exposure to this material may affect the following organs:

Kidneys Liver Central Nervous System Reproductive System

Effects of Overexposure

100-41-4**Systemic Effects****Ethylbenzene**

Chronic exposure to ethyl benzene causes fatigue, headache, and eye and upper respiratory tract irritation. Repeated contact with the skin may cause drying, defatting, and dermatitis.

Eye Contact

May cause mild irritation. Symptoms include stinging, tearing, and redness.

Ingestion

Aspiration hazard if swallowed. Can enter lungs and cause damage. May be fatal if swallowed. Possible pneumonia if vomited.

Inhalation

May cause respiratory tract irritation. May cause mucous membrane irritation. Can cause central nervous system (CNS) depression. Exposure at high concentrations may cause narcosis. Symptoms of narcosis include fatigue, drowsiness, staggering gait, and incoordination.

Skin Contact

Absorbed through skin. May cause skin irritation. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering.

1330-20-7**Xylene (mixed)**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: redness of the face and neck, mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), tight feeling in the chest, central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, effects on memory, respiratory depression (slowing of the breathing rate), shortness of breath, loss of coordination, confusion, irregular heartbeat, narcosis (dazed or sluggish feeling), coma.

Eye Contact

May cause mild irritation. Symptoms include stinging, tearing, and redness.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.

Skin Contact

Can cause skin irritation. Prolonged and repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of the skin, burns and other skin damage. Additional symptoms of skin contact may include: skin blistering. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

64742-89-8**VM&P Naphtha**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: sweating, fever, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), lung irritation, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), abdominal pain, frequent or painful urination, confusion, blood abnormalities, (breakage of red blood cells), kidney damage, lung damage, respiratory failure.

Eye Contact

May cause mild irritation. Symptoms include stinging, tearing, and redness.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.

Skin Contact

May cause mild skin irritation. Symptoms may include redness and burning of skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing). See Section 15 for carcinogenicity assessment.

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
100-41-4	Ethylbenzene	1% - 5%	IARC (2B) ACGIH (A3)

Section 12 - Ecological Information

Component Ecotoxicity

Xylene (mixed isomers)

Ecotoxicity

No data available

Persistence and Degradability

No data available

Bioaccumulative Potential

No data available

Mobility in Soil

No data available

Other Adverse Effects

Ozone Depletion Potential - Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances -

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Ecotoxicity

Toxicity to fish - LC50; (Oncorhynchus mykiss (rainbow trout)): 10 mg/l;

Exposure time: 96 h

Toxicity to fish - LC50; (Oncorhynchus mykiss (rainbow trout)): 8.2 mg/l;

Exposure time: 96 h; Test Type: semi-static test

Toxicity to fish - LC50 (Pimephales promelas (fathead minnow)): 8.2 mg/l;

Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates - EC50 (Daphnia magna (Water flea)): 4.5 mg/l; Exposure time: 48 h; Test Type: Immobilization

Toxicity to algae - EC50 (Pseudokirchneriella subcapitata (green algae)): 3.1 mg/l; Exposure time: 72 h

Toxicity to algae - EC50 (Pseudokirchneriella subcapitata (green algae)): 3.7 mg/l; Exposure time: 96 h; Test Type: static test

Toxicity to fish (Chronic Toxicity) - NOELR (Pimephales promelas (fathead minnow)): 2.6 mg/l; Exposure time: 14 d

Toxicity to daphnia and other aquatic invertebrates (Chronic Toxicity)- NOEL (Daphnia magna (Water flea)): 2.6 mg/l; Exposure time: 21 days

Chronic aquatic toxicity (Assessment) - Toxic to aquatic life with long lasting effects.

Persistence and Degradability

No data available

Bioaccumulative Potential

Partition coefficient: n-octanol/water - log Pow: 2.13 - 4.85 (25 °C)

Mobility in Soil

No data available

Other Adverse Effects

Ozone Depletion Potential - Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances - Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life with long lasting effects

Ecotoxicity

Toxicity to fish - LC50 *Oncorhynchus mykiss* (rainbow trout): 4.2 mg/l; Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates - EC50 *Daphnia magna* (Water flea): 1.8 - 2.4 mg/l; Exposure time: 48 h; Test type: static test

Toxicity to algae - EC50 *Skeletonema costatum* (marine diatom): 4.9 mg/l - Exposure time: 72 h; Test type: static test

Persistence and Degradability

Biodegradability aerobic - Exposure time 28 d Result: 70 - 80 % - Readily biodegradable.

Bioaccumulative Potential

Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

Mobility in Soil

No data available

Other Adverse Effects

Ozone Depletion Potential - Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances - Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life with long lasting effects.

Section 13 - Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14 - Transport Information

This material is classified for transport as follows:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Paint	1263	III	3

Section 15 - Regulatory Information

According to the Reg. (EC) No 1272/2008, relating to the classification packaging and labelling of dangerous substances and preparations, the product is labelled as follows:

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING!

This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

Ethylbenzene 100-41-4 1 - 5%

Carcinogenicity:

IARC: Group 2B: Possibly carcinogenic to humans

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Ethylbenzene 100-41-4 1 - 5%

Carcinogenicity:

IARC - No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH - No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA - No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP - No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Aliphatic Petroleum Distillates 64742-89-8 1 - 5%

Xylene (mixed isomers) 1330-20-7 20 - 30%

Commonwealth of Massachusetts "Right to Know": This product contains the following toxic or hazardous substances which appear on the Massachusetts Substance List:

Ethylbenzene 100-41-4 1 - 5%

Xylene (mixed) 1330-20-7 20 - 30%

New Jersey Worker and Community Right To Know Hazardous Substance List: The following substances appear on the New Jersey Right To Know Hazardous Substance List.

Ethylbenzene 100-41-4 1 - 5%

Aliphatic Petroleum Distillates 64742-89-8 1 - 5%

Xylene (mixed) 1330-20-7 20 - 30%

Commonwealth of Pennsylvania Worker and Community Right-To-Know Act: This product contains the following chemicals which appear on the Pennsylvania Hazardous Substance List:

Ethylbenzene 100-41-4 1 - 5%

Aliphatic Petroleum Distillates 64742-89-8 1 - 5%

Xylene (mixed) 1330-20-7 20 - 30%

WHMIS Classification B2 Flammable Liquid / D2A Very Toxic Material

Ethylbenzene 100-41-4 1 - 5%

Xylene (mixed isomers) 1330-20-7 20 - 30%

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act, and Title 40 of the Code of Federal Regulations, part 372.

1330-20-7 Xylene (mixed isomers) 20 - 30%

100-41-4 Ethylbenzene 1.0 - 5%

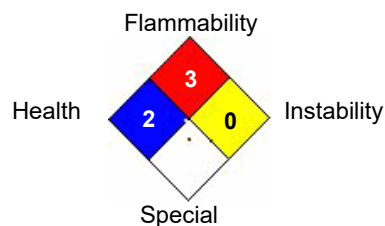
Section 16 - Other Information

Hazardous Material Information System (HMIS)

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0
PERSONAL PROTECTION	E

HMIS & NFPA Hazard Rating Legend
* = Chronic Health Hazard
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH
4 = EXTREME

National Fire Protection Association (NFPA)



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The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by Glyptal, Inc., and to recommend precautionary measures for the storage and handling of the products. No liability can be assumed for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products. It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

Reviewer Revision

Date Prepared: 9/15/2020

Section 1 – Product & Company Identification

Product Name: GREENLEE Hydraulic Oil

Product Catalog No: 4016GB and 4017GB

Product ID No: 90510593 (Gallon); 90508608 (Quart)

Recommended Use: For use with Greenlee hydraulic equipment

Restrictions on Use: Industrial use only

Company Information:

North America

GREENLEE TOOLS, INC.
4455 Boeing Drive
Rockford, Illinois 61109-2932
1-815-387-9547
(8:00 am – 5:00 pm EST, M-F)
Emergency Telephone
call 9-1-1 or local emergency number
www.Greenlee.com

Canada

Emerson Electric Canada Limited
66 Leek Crescent , Richmond Hill,
Ontario L4B 1H1
905-762-1010

Revision: C

Issue Date: January 12, 2024

Product Name : GREENLEE Hydraulic Oil

Section 2 – Hazards Identification

EMERGENCY OVERVIEW				
		HMIS		
GHS Classification		HEALTH	1	
Physical Hazards	Not Classified	FLAMMABILITY	1	
		PHYSICAL HAZARD	0	
Health and Environmental Hazards	See below	PERSONAL PROTECTION	See Section 8	
Signal Word	WARNING			

Health and Environmental Hazards**Eye damage/irritation** Category 2B – Causes eye irritation.**Precautionary Statements**

Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.**If eye irritation persists:** Get medical advice or attention.**Section 3 – Composition / Information On Ingredients**

Component	CAS Number	Percentage
Petroleum oil	64742-65-0	>90

Section 4 – First Aid Measures

Skin Contact	First aid not normally required. Remove contaminated clothing. Wash area of contact with soap and water. Wash clothing before reuse. Get medical attention if irritation occurs and persists.
Eye Contact	Remove contact lenses. Flush with water until all traces of material are gone. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.
Inhalation	Remove affected person from source of exposure. Get medical attention if discomfort persists.
Ingestion	Do not induce vomiting because of danger of aspiration into

Product Name : GREENLEE Hydraulic Oil

lungs. If spontaneous vomiting occurs, monitor for breathing difficulty. Get medical attention.

Section 5 – Fire Fighting Measures

Basic Firefighting Procedures

Treat as an oil fire. Do not use a water jet. Use water spray, dry chemical, foam or CO₂ to extinguish fire. Use a water spray to cool fire-exposed containers, structures and to protect personnel. Exposed firefighters should wear MSHA/NIOSH approved self-contained breathing apparatus with full-face mask and full protective equipment. Flush spills away from sources of ignition.

Unusual Fire and Explosion Hazards

Combustible at high temperatures. Irritating or toxic substances may be emitted.

Section 6 – Accidental Release Measures

Refer to Section 8: Exposure Control and Personal Protection

Emergency Action	Isolate release area and keep unnecessary people away. Exercise caution regarding personnel safety and exposure.
Spill/Leak Procedure	Floor and surfaces may be slippery. Dike with sand or other noncombustible material. Flush area with water provided runoff does not enter drain or sewer; use absorbent material and dispose of properly.
Notification	Any spill or release to navigable water that causes a visible sheen upon the water must be reported immediately to the National Response Center (800/424-8802), as required by U.S. federal law.

Product Name : GREENLEE Hydraulic Oil**Section 7 – Handling And Storage****Refer to Section 8: Exposure Control and Personal Protection****Handling**

Wear proper protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Do not ingest. For industrial use only. Use good hygiene practices when handling product, including changing and laundering work clothes after use. Get medical attention if you are exposed and feel unwell. The shipping and storage container is not designed to be pressurized. Do not use pressure to empty the container as it may rupture with explosive force. Containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly. Empty containers may contain residue or vapors. Do not cut, grind, drill, weld or reuse containers.

Storage

Store product in closed containers in a well-ventilated area away from heat, sources of ignition and incompatibles. Do not store in unlabeled containers. Empty containers may contain residue or vapors.

Section 8 – Exposure Controls / Personal Protection**Component**
Petroleum oil**ACGIH TLV**
5 mg/m³**OSHA PEL**
5 mg/m³**Engineering Controls**

Use appropriate ventilation to maintain airborne concentration limits below recommended exposure limits.

Eye and Face Protection

Wear safety glasses; use face shield if splashing is possible.

Skin Protection

Oil resistant gloves should be used to avoid repeated contact.

Respiratory Protection

Not normally needed. A NIOSH or MSHA approved respirator should be used in areas with high vapor concentrations or oil misting.

Product Name : GREENLEE Hydraulic Oil

Section 9 – Physical And Chemical Properties

Appearance/Physical State	Amber liquid	Flash Point	>300 °F
Specific Gravity (Water=1)	See Data Sheet	Upper/Lower Flammability Limits (Vol. %)	Not Determined
pH	Not Applicable	Auto-ignition Temperature	Not Determined
Solubility in Water	Negligible	Decomposition Temperature	Not Determined
Odor	Petroleum	Vapor Pressure	Not Determined
Odor Threshold	Not Determined	Vapor Density (Air=1)	>1
Melting/Freezing Point	Not Determined	Partition Coefficient (n-octanol/water)	Not Determined
Boiling Range	Not Determined	Viscosity	See Data Sheet
Initial Boiling Point	Not Determined	Critical Temperature	Not Determined
Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Those should be requested separately.			

Section 10 – Stability And Reactivity

Reactivity	Does not react under normal conditions of use.
Chemical Stability	Stable under normal conditions of use.
Stability/Incompatibility	Avoid contact with strong oxidizers.
Conditions to Avoid	Open flame or sources of ignition.
Hazardous Reactions/Decomposition Products	Does not decompose under normal conditions; combustion may produce CO, CO ₂ , volatile hydrocarbons and other possibly toxic gases.

Section 11 – Toxicological Information

Likely Routes of Exposure	Inhalation, skin, eyes
Acute Effects	Product not tested. Based on components the effects of skin contact, inhalation and ingestion are expected to be mild. Some temporary eye irritation may occur. Refer to

Product Name : GREENLEE Hydraulic Oil

Chronic Effects	Sections 2 and 4 for recommended actions. Any acute symptoms may be aggravated. Refer to Sections 2 and 4 for recommended actions.
Symptoms	Prolonged or repeated exposure may cause redness, drying, or cracking of the skin, eye irritation, gastrointestinal and respiratory discomfort. Refer to Sections 2 and 4 for recommended actions.
Carcinogenicity	No components of this product are found to be carcinogens by NTP, IARC or OSHA.

Section 12 – Ecological Information

Ecotoxicity	Not Determined
Persistence and Biodegradability	Not Determined
Bioaccumulative Potential	Not Determined
Mobility in Soil	Not Determined

Section 13 – Disposal Consideration

Dispose of this product in compliance with all applicable federal, state and local regulations.

Section 14 – Transportation Information

DOT	Not Regulated
UN Proper Shipping Name/Number	Not Regulated

Section 15 – Regulatory Information

Chemical Inventory Lists	All ingredients are listed on TSCA and DSL
SARA (311/312) Reportable Hazard Categories	None
SARA 313 Ingredients	None



Product Name : GREENLEE Hydraulic Oil

Section 16 – Other Information

Prepared by:..... GREENLEE TOOLS, INC.

Operating Standard..... 6-603

Revision C

EC Number 002871

Issue Date January 12, 2024

Last Revision Date June 22, 2023

GREENLEE TOOL BELIEVES THE STATEMENTS, TECHNICAL INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE RELIABLE BUT THEY ARE GIVEN WITHOUT WARRANTY OR GUARANTEE OF ANY KIND, EXPRESSED OR IMPLIED, AND WE ASSUME NO RESPONSIBILITY FOR ANY LOSS, DAMAGE OR EXPENSE, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THEIR USE.

Fiche des données de sécurité

Section 1 – Identification du produit et du fournisseur
--

Nom du produit :	GREENLEE Hydraulic Oil
N° de catalogue du produit :	4016GB et 4017GB
Références du produit :	90510593 (gallon) ; 90508608 (quart)
Utilisation recommandée :	Prévu pour le matériel hydraulique Greenlee
Limites d'utilisation :	Utilisation industrielle uniquement
Fournisseur :	

<u>Amérique du Nord</u> GREENLEE TOOLS, INC. 4456 Boeing Drive Rockford, Illinois 61109-2932 1-800-435-0786 (8h à 17h CST, du lundi au vendredi) Numéro d'urgence Composer le 9-1-1 ou le numéro d'urgence local www.Greenlee.com	<u>Canada</u> Emerson Electric Canada Limited 66 Leek Crescent, Richmond Hill, Ontario L4B 1H1 906-762-1010
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Révision :	C
Date de publication :	12 janvier 2024

Nom du produit : GREENLEE Hydraulic Oil

Section 2 – Identification des dangers

UREGENCES (aperçu)				
		HMIS		
Classification GHS		Santé	1	
Dangers physiques	Non classifié	Inflammabilité	1	
		Danger physique	0	
Dangers pour la santé et l'environnement	Voir ci-dessous	Protection individuelle	Voir Section 8	
Mot clé	AVERTISSEMENT			

Dangers pour la santé et l'environnement**Blessure ou irritation oculaire** Catégorie 2B – Provoque des irritations oculaires.**Avertissements**

Se laver soigneusement après manipulation.

En cas d'atteinte oculaire : Rincer soigneusement avec de l'eau pendant quelques minutes. Si possible, enlever d'éventuelles lentilles. Continuer le rinçage.**Si l'irritation oculaire persiste** : Consulter les services médicaux.**Section 3 – Composition/information sur les composants**

Composant	Numero CAS	Pourcentage
Huile minérale	64742-65—0	>90

Section 4 – Premiers soins**Contact cutané**

Normalement, aucuns premiers soins ne sont nécessaires. Retirer les vêtements contaminés. Laver la peau exposée au produit avec de l'eau et du savon. Laver les vêtements avant leur réutilisation. Consulter les services médicaux en cas d'irritation persistante.

Contact oculaire

Elever les lentilles. Rincer avec de l'eau jusqu'à élimination de toutes traces du produit. Eloigner les paupières des yeux pour parfaire le rinçage. Consulter les services médicaux si l'irritation persiste.

Nom du produit : GREENLEE Hydraulic Oil

Inhalation	Eloigner l'individu atteint de la source d'exposition. Faire appel aux services médicaux si le malaise persiste.
Ingestion	Ne pas provoquer de vomissement en raison des risques d'inhalation. En cas de vomissement spontanée, s'assurer qu'il n'y a pas de difficulté respiratoire. Consulter les services médicaux.

Section 5 – Mesures à prendre en cas d'incendie
--

Principes de lutte contre l'incendie	Traiter l'incendie comme incendie pétrolifère. Ne pas utiliser de jet d'eau haute pression. Utiliser un extincteur à eau, à poudre, à mousse ou au CO ₂ pour éteindre l'incendie. Arroser les conteneurs et les structures exposées au feu avec de l'eau pour les refroidir, et le personnel pour le protéger. Les pompiers exposés devraient porter des respirateurs autonomes homologués MSHA/NIOSH avec masque intégral et équipements de protection individuelle. Chasser les déversements à l'écart de la source d'allumage.
Dangers d'incendie et d'explosion inhabituels	Combustible à hautes températures. Substances irritantes ou toxiques peuvent être émises.

Section 6 – Mesures à prendre en cas de déversements accidentels

Se reporter à la Section 8 : Contrôle d'exposition et protection individuelle

Mesures d'urgence	Isoler la zone de déversement et éloigner tout personnel non nécessaire. Respecter les précautions d'usage visant la sécurité et l'exposition du personnel.
Méthodes de confinement et de nettoyage des déversements et fuites	Les sols et les surfaces risquent d'être glissants. Bloquer à l'aide de sable ou autre matière non combustible. Rincer la zone à grande eau tant que l'effluent ne risque pas d'atteindre les réseaux d'eaux pluviales ou usées. Sinon, utiliser des matériaux absorbants pour éponger et recycler de manière

Nom du produit : GREENLEE Hydraulic Oil

appropriée.

Notification

Selon la réglementation fédérale des Etats-Unis, tout déversement qui laisse une pellicule luisante sur les eaux navigables doit être immédiatement signalé auprès du National Response Center (800/424-8802).

Section 7 – Manutention et stockage
--

Se reporter à la Section 8 : Contrôle d'exposition et protection individuelle

Manutention

Prévoir les équipements de protection appropriés. Eviter tout contact avec la peau, les yeux et les vêtements. Eviter d'en inhaler la vapeur ou la buée. Ne pas ingérer. Pour utilisation industrielle uniquement. Manipuler ce produit de manière hygiénique, y compris lors du changement ou du lessivage des vêtements de travail en fin d'opération. Consulter les services médicaux en cas de malaise après exposition au produit. Le conteneur d'expédition et de stockage n'est pas sensé être pressurisé. Ne pas pressuriser le conteneur pour le vider, car cela risque de le faire éclater avec une force explosive. Les conteneurs doivent être complètement égouttés et fermés avant d'être envoyés à un centre de reconditionnement ou de recyclage approprié. Les conteneurs vides risquent de renfermer des résidus ou des vapeurs. Ne pas couper, meuler, percer souder ou réutiliser les conteneurs.

Stockage

Stockez ce produit dans des conteneurs fermés entreposés dans des locaux bien ventilés et à l'abri de la chaleur, des sources de combustion et des produits incompatibles. Ne pas stocker dans des conteneurs non étiquetés. Les conteneurs vides risquent de renfermer des résidus ou des vapeurs

Nom du produit : GREENLEE Hydraulic Oil

Section 8 – Contrôle de l'exposition/protection individuelle

Composant	ACGIH TLV	OSHA PEL
Huile minérale	5 mg/m ³	5 mg/m ³

Contrôles techniques	Prévoir une ventilation suffisante pour maintenir l'exposition aux concentrations aériennes sous les limites d'exposition recommandées.
Protection des yeux et du visage	Porter des lunettes de sécurité, voire une visière intégrale s'il y a risque d'éclaboussure.
Protection de la peau	Le port de gants résistants à l'huile est conseillé pour éviter les contacts répétitifs.
Protection respiratoire	Pas normalement requise. Un respirateur homologué NIOSH ou MSHA devrait être prévu face aux zones renfermant d'importantes concentrations de vapeur ou de buée d'huile.

Section 9 – Propriétés physiques et chimiques

Apparence/état physique	Liquide ambré	Point d'éclair	>300 °F
Densité (eau = 1)	Voir fiche technique	Limites supérieure/inférieure d'inflammabilité (Vol. %)	Non déterminé
pH	Non applicable	Température d'auto-inflammation	Non déterminé
Solubilité dans l'eau	Négligeable	Température de décomposition	Non déterminé
Odeur	Pétrole	Pression de vapeur	Non déterminé
Seuil odorifique	Non déterminé	Densité de vapeur (air = 1)	>1
Point de fusion/congélation	Non déterminé	Coefficient de partage (n-octanol/eau)	Non déterminé
Plage d'ébullition	Non déterminé	Viscosité	Voir fiche technique
Point d'ébullition initial	Non déterminé	Température critique	Non déterminé

Nom du produit : GREENLEE Hydraulic Oil

Nota : Les propriétés physiques et chimiques ne sont indiquées que pour raisons de sécurité, de santé et de considérations environnementales, sans nécessairement représenter les caractéristiques actuel du produit. Ces caractéristiques devraient être demandées séparément.

Section 10 – Stabilité et réactivité

Réactivité	Ne réagit pas sous conditions d'utilisation normales.
Stabilité chimique	Stable sous conditions d'utilisation normales.
Stabilité/incompatibilité	Eviter le contact avec les oxydants puissants.
Conditions à éviter	Flammes ouvertes et sources d'allumage.
Réactions dangereuses/produits de décomposition	Ne décompose pas sous conditions normales ; sa combustion risque d'émettre du CO, du CO ₂ , des hydrocarbures volatiles et autres gaz potentiellement toxiques.

Section 11 – Données toxicologiques

Voies d'exposition probables	Inhalation, cutanée, oculaire
Effets aigus	Produit non testé. Basé sur les composants, ses effets en cas de contact cutané, d'inhalation et d'ingestion sont estimés légers. Une certaine irritation oculaire temporaire est possible. Se reporter aux Sections 2 et 4 pour les mesures conseillées.
Toxicité reproductive	Risque de nuire aux enfants allaitants.
Effets chroniques	Tout symptôme aigu risque d'être aggravé. Se reporter aux Sections 2 et 4 pour les mesures conseillées.
Symptômes	Une exposition prolongée ou répétée risque d'occasionner des rougeurs, dessèchements ou fissurations de la peau, des irritations oculaires, voire des malaises gastro-intestinaux ou respiratoires. Se reporter aux Sections 2 et 4 pour les mesures conseillées.
Cancérogénicité	Aucun composant de ce produit n'a été trouvé cancérogène par NTP, IARC ou OSHA.

Nom du produit : GREENLEE Hydraulic Oil

Section 12 – Données écologiques

Ecotoxicité	Non déterminé
Persistance et biodégradabilité	Non déterminé
Potentiel de bioaccumulation	Non déterminé
Mobilité dans le sol	Non déterminé

Section 13 - Recyclage

Le recyclage de ce produit doit se faire selon l'ensemble de la réglementation fédérale, régionale et locale applicable.

Section 14 - Transport

DOT	Non réglementé
Nom/numéro d'expédition NU	Non réglementé

Section 15 – Règlementation

Répertoires d'inventaire chimique	Tous ingrédients indiqués sur TSCA et DSL
Catégories des dangers reportables SARA (311/312)	Aucun
Ingrédients SARA 313	Aucun

Nom du produit : GREENLEE Hydraulic Oil

Section 16 – Autres informations

Rédigé par..... GREENLEE TOOLS, INC.

Norme applicable 6-603

Révision C

ECN..... 002871

Date de publication 12 janvier 2024

Dernière révision 22 juin 2023

Greenlee Tools considère que les affirmations, renseignements techniques et recommandations ci-présentes sont fiables, mais les avance sans garantie quelconque, formelle ou implicite, et n'accepte aucune responsabilité en cas de perte, de dommages ou de dépenses directes ou consécutives résultant de leur utilisation.

Sección 1 – Identificación del producto y de la empresa

Nombre del producto: GREENLEE Hydraulic Oil

N.º del catálogo de productos: 4016GB y 4017GB

N.º de ID del producto: 90510593 (galón); 90508608 (cuarto)

Uso recomendado: Para uso con equipamiento hidráulico de Greenlee

Restricciones de uso: Solo para uso industrial

Información de la empresa:

<u>Norteamérica</u> GREENLEE TOOLS, INC. 4455 Boeing Drive Rockford, Illinois 61109-2932 1-815-387-9547 (8:00 a. m. - 5:00 p. m. CST, L-V) Teléfono de emergencia Llamar al 9-1-1 o al número de emergencia local www.Greenlee.com	<u>Canadá</u> Emerson Electric Canada Limited 66 Leek Crescent, Richmond Hill, Ontario L4B 1H1 905-762-1010
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Revisión: C

Fecha de publicación: 12 de enero de 2024

Nombre del producto: Aceite hidráulico GREENLEE

Sección 2 – Identificación de peligros

DESCRIPCIÓN GENERAL DE EMERGENCIAS				
		HMIS		
Clasificación GHS		SALUD	1	
Peligros físicos	No homologado	INFLAMABILIDAD	1	
		PELIGROS FÍSICOS	0	
Peligros medioambientales y para la salud	Consultar a continuación	PROTECCIÓN PERSONAL	Consultar la Sección 8	
Palabra clave	ADVERTENCIA			

Peligros medioambientales y para la salud**Irritación o daño ocular** Categoría 2B – Causa irritación ocular.**Notas de precaución**

Lavar a fondo después de la manipulación.

Si entra en contacto con los ojos: Enjuagar cuidadosamente con agua durante varios minutos. Retirar lentes de contacto si las hay y es fácil de hacer. Seguir enjuagando.**Si la irritación persiste:** Buscar atención médica.**Sección 3 – Composición/información sobre los componentes**

Componente	Número CAS	Porcentaje
Aceite de petróleo	64742-65-0	>90

Sección 4 – Medidas de primeros auxilios**Contacto con la piel**

Normalmente no se requieren primeros auxilios. Quitarse las prendas de ropa contaminadas. Lavar el área de contacto con agua y jabón. Lavar la ropa antes de reutilizarla. Si la irritación persiste, obtener atención médica.

Contacto con los ojos

Retirar las lentes de contacto. Lavar con agua hasta que no haya restos de material. Los párpados deben mantenerse alejados del globo ocular para asegurar un enjuague profundo. Si la irritación persiste, obtener atención médica.

Nombre del producto: Aceite hidráulico GREENLEE

Inhalación	Alejar a la persona afectada de la fuente de exposición. Si la molestia persiste, obtener atención médica.
Ingestión	No inducir el vómito por el riesgo de aspiración hacia los pulmones. Si se producen vómitos de forma espontánea, comprobar si hay dificultad para respirar. Obtener atención médica.

Sección 5 – Medidas para combatir incendios
--

Procedimientos básicos contra incendios

Tratar como un incendio de aceite. No utilizar chorro de agua. Utilizar rocío de agua, polvo químico, espuma o CO2 para extinguir el fuego. Utilizar rocío de agua para enfriar recipientes y estructuras expuestas al fuego y para proteger al personal. Los bomberos expuestos deben usar un aparato de respiración autónomo aprobado por MSHA/NIOSH con máscara facial completa y equipo de protección completo. Enjuagar los derrames alejándolos de fuentes de ignición.

Peligros inusuales de incendio y explosión

Combustible a altas temperaturas. Pueden emanarse sustancias irritantes o tóxicas.

Sección 6 – Medidas en caso de derrames accidentales

Consultar la Sección 8: Controles de exposición y protección personal

Acción de emergencia	Aislar el área donde se produjo la fuga y mantener alejadas a las personas innecesarias. Actuar con cautela con respecto a la seguridad y la exposición del personal.
Procedimiento ante derrames/fugas	El suelo y las superficies pueden estar resbaladizos. Hacer un dique con arena u otro material no combustible. Lavar bien el área con agua siempre que no ingrese al desagüe ni al alcantarillado; utilizar material absorbente y desecharlo adecuadamente.

Nombre del producto: Aceite hidráulico GREENLEE

Notificación

Cualquier derrame o fuga que llegue al agua navegable y que cause un brillo visible sobre el agua debe notificarse de inmediato al Centro Nacional de Respuesta (800/424-8802), según lo requiere la ley federal de los EE. UU.

Sección 7 – Manipulación y almacenamiento
--

Consultar la Sección 8: Controles de exposición y protección personal

Manipulación

Utilizar el equipo de protección personal adecuado. Evitar el contacto con la piel, los ojos y la ropa. No respirar vapores o nieblas. No ingerir. Solo para uso industrial. Seguir buenas prácticas higiénicas al manipular el producto, como cambiar y lavar la ropa de trabajo después de su uso. Obtener atención médica si está expuesto y se siente mal. El contenedor de envío y almacenamiento no está diseñado para ser presurizado. No aplicar presión para vaciar el envase, ya que podría romperse con fuerza explosiva. Los envases deben drenarse completamente, cerrarse adecuadamente y devolverse rápidamente para el reacondicionamiento del tambor o bien ser desechados correctamente. Los envases vacíos pueden contener residuos o vapores. No cortar, esmerilar, perforar, soldar ni reutilizar envases.

Almacenamiento

Conservar el producto en envases cerrados, en una zona bien ventilada, lejos del calor, fuentes de ignición y otras sustancias incompatibles. No se debe guardar en un envase sin rotular. Los envases vacíos pueden contener residuos o vapores.

Nombre del producto: Aceite hidráulico GREENLEE

Sección 8 – Controles de exposición/Protección personal

Componente	TLV de la ACGIH	PEL de la OSHA
Aceite de petróleo	5 mg/m ³	5 mg/m ³
Controles de ingeniería	Utilizar ventilación adecuada para mantener límites de concentración en el aire por debajo de los límites de exposición recomendados.	
Protección ocular y del rostro	Usar gafas de seguridad; utilizar un protector facial si es posible que haya salpicaduras.	
Protección de la piel	Deberán utilizarse guantes resistentes al aceite para evitar el contacto repetido.	
Protección respiratoria	No se necesita normalmente. Se debe utilizar un equipo de respiración aprobado por NIOSH o MSHA en áreas con altas concentraciones de vapor o niebla de aceite.	

Sección 9 – Propiedades físicas y químicas

Aspecto y estado físico	Líquido ámbar	Punto de inflamación	>300 °F
Gravedad específica (agua=1)	Consultar la Hoja de datos	Límites de inflamabilidad superior/inferior (vol. %)	Sin determinar
pH	No se aplica	Temperatura de autoignición	Sin determinar
Solubilidad en agua	Insignificante	Temperatura de descomposición	Sin determinar
Olor	Petróleo	Presión de vapor	Sin determinar
Umbral de olor	Sin determinar	Densidad de vapor (Aire=1)	>1
Temperatura de congelamiento/fusión	Sin determinar	Coeficiente de reparto (n-octanol/agua)	Sin determinar
Intervalo de ebullición	Sin determinar	Viscosidad	Consultar la Hoja de datos
Punto inicial de ebullición	Sin determinar	Temperatura crítica	Sin determinar
Nota: Las propiedades físicas y químicas se proporcionan solo por consideraciones de seguridad, salud y medioambiente, y pueden no representar completamente las especificaciones del producto. Deben solicitarse por separado.			

Sección 10 – Estabilidad y reactividad

Nombre del producto: Aceite hidráulico GREENLEE

Reactividad	No reacciona en condiciones de uso normales.
Estabilidad química	Estable en condiciones de uso normales.
Estabilidad/incompatibilidad	Evitar el contacto con oxidantes fuertes.
Condiciones a evitar	Llama abierta o fuente de ignición.
Reacciones/Productos de descomposición peligrosos	No se descompone en condiciones normales; la combustión puede producir CO, CO ₂ , hidrocarburos volátiles y otros gases posiblemente tóxicos.

Sección 11 – Información toxicológica

Vías de exposición probables	Inhalación, piel, ojos
Efectos agudos	Producto no probado. Según los componentes, se espera que los efectos del contacto con la piel, inhalación e ingestión sean leves. Se puede producir cierta irritación ocular temporal. Consultar las acciones recomendadas en las Secciones 2 y 4.
Efectos crónicos	Los síntomas agudos pueden empeorar. Consultar las acciones recomendadas en las Secciones 2 y 4.
Síntomas	La exposición prolongada o repetida puede causar enrojecimiento, sequedad o agrietamiento de la piel, irritación ocular, molestias gastrointestinales y respiratorias. Consultar las acciones recomendadas en las Secciones 2 y 4.
Carcinogenicidad	No se ha determinado que ningún componente de este producto que sea una sustancia carcinogénica según NTP, IARC u OSHA.

Sección 12 – Información ecológica

Ecotoxicidad	Sin determinar
Persistencia y biodegradabilidad	Sin determinar
Potencial de bioacumulación	Sin determinar
Movilidad en el suelo	Sin determinar

Sección 13 – Consideraciones de desecho

Desechar este producto de acuerdo con todas las

Nombre del producto: Aceite hidráulico GREENLEE

normas federales, estatales y locales aplicables.

Sección 14 – Información de transporte

DOT	No está reglamentado
Nombre/Número de envío correcto de la ONU:	No está reglamentado

Sección 15 – Información normativa

Listas de inventario de productos químicos	Todos los componentes figuran en TSCA y DSL
Categorías de peligros que se deben informar según SARA (311/312)	Ninguno
Componentes según SARA 313	Ninguno

Nombre del producto: Aceite hidráulico GREENLEE

Sección 16 – Otra información

Preparado por: GREENLEE TOOLS, INC.

Norma operativa..... 6-603

Revisión C

Número EC 002871

Fecha de publicación 12 de enero de 2024

Fecha de última revisión 22 de junio de 2023

GREENLEE TOOL CONSIDERA QUE LAS DECLARACIONES, LA INFORMACIÓN TÉCNICA Y LAS RECOMENDACIONES CONTENIDAS EN ESTE DOCUMENTO SON CONFIABLES, PERO SE OFRECEN SIN GARANTÍA DE NINGÚN TIPO, EXPRESA O IMPLÍCITA, Y NO ASUMIMOS NINGUNA RESPONSABILIDAD POR PÉRDIDAS, DAÑOS O GASTOS, DIRECTOS O INDIRECTOS, DERIVADOS DE SU USO.

1 Identification

- **Product identifier**
- **Trade name:** Hilti Firestop Sealant CFS-S SIL GG
Hilti Firestop Sealant CFS-S SIL SL
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** Building and construction work
- **Application of the substance / the mixture**
Assembly foam
Construction chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Hilti (Canada) Corp.
2360 Meadowpine Boulevard
Mississauga, Ontario L5N 6S2
Phone: (800) 363-4458
Fax: (800) 363-4459
- **Information department:**
chemicals.hse@hilti.com
see section 16
- **Emergency telephone number:**
Chem-Trec
Tel.: 1 800 424 9300
Tox Info Suisse - 24 h Service
Tel.: 0041 / 44 251 51 51 (international)

2 Hazard(s) identification

- **Classification of the substance or mixture**
Skin Sens. 1 H317 May cause an allergic skin reaction.
Repr. 2 H361 Suspected of damaging fertility or the unborn child.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



- **Signal word** Warning
- **Hazard-determining components of labeling:**
Methyl-tris(methylethylketoximo)-silan
3-aminopropyltriethoxysilane
- **Hazard statements**
H317 May cause an allergic skin reaction.
H361 Suspected of damaging fertility or the unborn child.
- **Precautionary statements**
P261 Avoid breathing vapours.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 If on skin: Wash with plenty of water.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- **Hazard description:**
- **WHMIS classification**



D2A - Very toxic material causing other toxic effects

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Additional information:**
In use the product releases 2-butanone oxime (methyl ethyl ketoxime; MEKO) (<4%) which vaporises.
In cases of prolonged exposure MEKO may damage nasal membranes. If MEKO is inhaled in large quantities over prolonged periods of time there may be irreversible damage to health:
H351: Suspected of causing cancer.

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:**

Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

22984-54-9	Methyl-tris(methylethylketoximo)-silan	2.5-10%
919-30-2	3-aminopropyltriethoxysilane	<2.5%
556-67-2	octamethylcyclotetrasiloxane	0.1-1%

- **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

- **Description of first aid measures**
- **General information** Immediately remove any clothing soiled by the product.
- **After inhalation** Take affected persons into fresh air and keep quiet.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Do not induce vomiting; immediately call for medical help.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
Carbon monoxide (CO)
Carbondioxide (CO₂)
In certain fire conditions, traces of other toxic gases cannot be excluded.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Ensure adequate ventilation

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Ensure adequate ventilation
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Pick up mechanically.
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling**
The usual precautionary measures for handling chemicals should be followed.
Use only in well ventilated areas.
Do not inhale the vapours released during application.
Keep away from heat and direct sunlight.
- **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Keep in a cool, dry and dark place; 41 °F / 5 °C to 77 °F / 25 °C.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Storage class** 11
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **CAS No. Designation of material % Type Value Unit**

Additional Occupational Exposure Limit Values for possible hazards during processing:

96-29-7 Methylenechloride (MEK) (<4%)

WEEL Long-term value	10 ppm
	DSEN

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures for handling chemicals should be followed.
Do not eat, drink, smoke or sniff while working.
Wash hands before breaks and at the end of work.
Immediately remove all soiled and contaminated clothing
Do not inhale gases / fumes / aerosols.
- **Breathing equipment:**
Use suitable respiratory protective device in case of insufficient ventilation.
Filter A
- **Recommended filter device for short term use:**
The use of an OSHA or NIOSH approved mask for dust and mist environment is recommended.
- **Protection of hands:**



Protective gloves.

EN 374

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Tightly sealed goggles.

EN 166 + EN 170

- **Body protection:**



Protective work clothing.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - Form:** Pasty
 - Color:** red / white
 - Odor:** Odorless
 - Odour threshold:** Not determined.
- **pH-value:** Not determined
- **Change in condition**
 - Melting point/Melting range:** Not determined.
 - Boiling point/Boiling range:** Not determined
- **Flash point:** 211 °C (412 °F) (DIN 53213)
- **Flammability (solid, gaseous)** Not determined.

(Contd. of page 3)

· Ignition temperature:	370 °C (698 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not applicable.
· Density at 20 °C (68 °F):	1.38 g/cm ³ (11.516 lbs/gal) (DIN 51757)
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Insoluble
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
dynamic:	Not determined
kinematic:	Not determined
· Other information	CFS-S SIL GG - VOC Content: 48 g/l (EPA Method 24) CFS-S SIL SL - VOC Content: 50 g/l (EPA Method 24)

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** Protect from humidity and water.
- **Incompatible materials:**
 - strong oxidizing agents
 - acids
 - Alkaline hydroxides
 - water
- **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

22984-54-9 Methyl-tris(methylethylketoximo)-silan

Oral | LD50 | 2000-3000 mg/kg (rat)

· **Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

(Contd. on page 5)

(Contd. of page 4)

- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Hand over to hazardous waste disposers.

· **European waste catalogue:**

08 04 09* | waste adhesives and sealants containing organic solvents or other dangerous substances

- **Uncleaned packagings:**
- **Recommendation:**
Dispose of packaging according to regulations on the disposal of packagings.
Non contaminated packagings can be reused.

14 Transport information

- | | |
|--|-----------------|
| · UN-Number | Void |
| · DOT, TDG, ADN, IMDG, IATA | Void |
| · UN proper shipping name | Void |
| · DOT, TDG, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | |
| · DOT, TDG, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | |
| · DOT, TDG, IMDG, IATA | Void |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | - |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65:**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **National regulations**

- **Information about limitation of use:** Employment restrictions concerning young persons must be observed.
- **Chemical safety assessment:** not required.

CA

(Contd. on page 6)

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS:

Hilti Corporation
Business Unit Chemicals
Quality/Safety/Environment
FL-9494 Schaan / Liechtenstein

chemicals.hse@hilti.com

Tel.: +423 234 3004

FAX.: +423 234 3462

· Date of preparation / last revision 05/19/2015 / 2**· Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Repr. 2: Reproductive toxicity, Hazard Category 2

· * Data compared to the previous version altered.

MATERIAL SAFETY DATA SHEET
IPEX 100 PVC CONDUIT SOLVENT CEMENT (Low VOC)

Page : 1

SLUYTER COMPANY LTD.

375 Steelcase Road East
Markham, Ontario L3R 1G3 Canada
Tel (905) 475-6011 Fax (905) 475-3119

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER-----SLUYTER COMPANY LTD.
375 Steelcase Road East
Markham, Ontario L3R 1G3
Canada
Tel (905) 475-6011
PRODUCT NAME-----IPEX 100 PVC CONDUIT SOLVENT CEMENT - LOW VOC
MANUFACTURED FOR-----Iplex Electrical Inc. 2441 Royal Windsor Drive, Mississauga,
ON L5J 4C7
PRODUCT USES-----For welding plastic pipes and fittings.
CHEMICAL FAMILY-----Poly Vinyl Chloride based cement

SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS / %	CAS / TLV	LD/50, ROUTE, SPECIES	LC/50, ROUTE, SPECIES
TETRAHYDROFURAN 35 - 50	109-99-9 200 ppm	1650 mg/kg Oral (Rat)	18000 ppm 4 hours Inhalation (Rat)
METHYL ETHYL KETONE 35 - 50	78-93-3 200 ppm	2737 mg/kg Oral (Rat)	23500 mg/m3 8 Hours Inhalation (Rat)
ACETONE 20 - 40	67-64-1 750 ppm	9750 mg/kg Oral (Rat)	16000 ppm 4 hours Inhalation (Rat)
CYCLOHEXANONE 3 - 8	108-94-1 25 ppm	1620 mg/kg Oral (Rat)	8000 ppm 1 Hour Inhalation (Rat)

SECTION 03: HAZARDS IDENTIFICATION

ROUTE OF ENTRY:-----
SKIN CONTACT-----Can cause moderate skin irritation,
defatting and dermatitis.
SKIN ABSORPTION-----No data available.
INHALATION-----See "EFFECTS OF CHRONIC EXPOSURE", below.
INHALATION CHRONIC-----Breathing of high vapour concentrations
could cause dizziness, headache or even
unconsciousness. May be anesthetic which
could result in other central nervous
system effects.
INGESTION-----Can cause gastro-intestinal irritation,
nausea, vomiting and diarrhea. Small
amounts of liquid aspirated into
respiratory system could cause severe
health effects (e.g. Bronchopneumonia or
Pulmonary Edema).
EYE CONTACT-----Contains materials that are severely
irritating to the eyes.
EFFECTS OF ACUTE EXPOSURE-----Refer to "ROUTE ENTRY" section.
EFFECTS OF CHRONIC EXPOSURE-----May cause damage to the central nervous
system. Prolonged or repeated skin contact
may cause drying or cracking of the skin.

Ref: 00000319

Preparation Date : July 12, 2017

EMERGENCY - CALL CANUTEC (613) 996-6666 (Collect)

MATERIAL SAFETY DATA SHEET
IPEX 100 PVC CONDUIT SOLVENT CEMENT (Low VOC)

Page : 2

SECTION 04: FIRST AID MEASURES

EYE CONTACT-----Check for and remove any contact lenses.
Immediately flush with water for a minimum
of 20 minutes and get medical attention.

SKIN CONTACT-----Remove contaminated clothing. Wash
affected area with water and soap. Seek
medical attention if irritation occurs or persists.

INHALATION-----Remove patient to fresh air. If not
breathing, trained personnel should
administer artificial respiration. Get
medical attention.

INGESTION-----Do NOT induce vomiting. Get immediate medical attention.

ADDITIONAL INFORMATION-----Contact your local poison control centre.

SECTION 05: FIRE FIGHTING MEASURES

FLAMMABILITY-----Flammable.

UNDER WHAT CONDITIONS-----Extremely flammable liquid. Dangerous fire
hazard when exposed to heat, flame or
temperatures above the flash point. As
vapours are heavier than air, they may
travel to a source of ignition and flash back

SPECIAL PROCEDURES-----A self-contained breathing apparatus is
required for fire fighting personnel. Use
water spray to cool fire exposed surfaces
and to protect personnel.

FLASH POINT (METHOD)----- -5°C TAG Closed Cup.

AUTO IGNITION TEMPERATURE-----321°C.

UPPER FLAMMABLE LIMIT (% VOL)-----11.80.

LOWER FLAMMABLE LIMIT (% VOL)-----2.20.

EXTINGUISHING MEDIA-----Alcohol foam, CO2 or dry chemical.

HAZARDOUS COMBUSTION PRODUCTS-----Carbon Dioxide. Carbon Monoxide. Hydrogen Chloride. Smoke.

SENSITIVITY TO MECHANICAL-----Unknown.

IMPACT

SENSITIVITY TO STATIC-----May be sensitive.

DISCHARGE

SECTION 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL-----Ventilate. Remove all sources of ignition,
open flames, sparks and heaters. Wear
protective gear (See SECTION 8). Large
spills must be collected for disposal.
Small spills can be wiped. Use a
non-combustible absorbent inorganic
material. Prevent run-off into drains,
sewers and other waterways.

SECTION 07: HANDLING AND STORAGE

HANDLING PROCEDURES-----Avoid skin and eye contact. Avoid breathing
vapours. Use adequate ventilation. Keep away
from heat, sparks and open flame.

STORAGE NEEDS-----Store away from all sources of heat and
ignition. Store in well ventilated
area. Keep container closed and out of
reach from children and pets when not in use.

Ref: 00000319

Preparation Date : July 12, 2017

EMERGENCY - CALL CANUTEC (613) 996-6666 (Collect)

MATERIAL SAFETY DATA SHEET
IPEX 100 PVC CONDUIT SOLVENT CEMENT (Low VOC)

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SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

PROTECTIVE EQUIPMENT:-----
EYE/TYPE-----Safety glasses.
RESPIRATORY/TYPE-----None required for normal use if adequate ventilation is maintained. Use NIOSH/MSHA approved respirator if the TLV is exceeded.
GLOVES/ TYPE-----Wear impervious gloves (Neoprene or Rubber).
CLOTHING/TYPE-----Not applicable.
FOOTWEAR/TYPE-----Not applicable.
OTHER/TYPE-----Eye bath and safety shower.
VENTILATION REQUIREMENTS-----Natural or mechanical (Explosion Proof) ventilation to keep vapour levels well below the TLV.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE-----Liquid.
ODOUR-----Ketone odour.
SPECIFIC GRAVITY-----0.90 - 1.00.
ODOUR THRESHOLD (ppm)-----Not available.
VAPOUR PRESSURE-----145 mmHg @ 20°C.
VAPOUR DENSITY (AIR=1)----- >1.00.
EVAPORATION RATE-----6.00 (NBUAC = 1).
BOILING POINT (deg C)-----65°C.
pH-----Not applicable.
SOLUBILITY IN WATER (% W/W)-----Negligible.
COEFFICIENT OF WATER\OIL-----Not available.
DISTRIBUTION
FREEZING POINT----- <0°C.
MELTING POINT (deg C)-----Not applicable.
MOLECULAR WEIGHT-----Not applicable.

SECTION 10: STABILITY AND REACTIVITY

INCOMPATIBILITY-----Strong acids and strong bases. Chlorinated solvents. Oxidizing agents.
REACTIVITY CONDITIONS-----Excessive heat, sparks and open flame.
HAZARDOUS PRODUCTS OF DECOMPOSITION-----Carbon Dioxide. Carbon Monoxide. Hydrogen Chloride. Peroxides.

SECTION 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL-----See "HAZARDOUS INGREDIENTS" in SECTION 2.
IRRITANCY OF MATERIAL-----Moderate.
SENSITIZING CAPABILITY OF MATERIAL-----Not available.
CARCINOGENICITY OF MATERIAL-----Reversible liver damage at high dosages is possible.
TERATOGENICITY-----No information is available and no adverse teratogenicity effects are anticipated.
MUTAGENICITY-----No information is available and no adverse mutagenicity effects are anticipated.
REPRODUCTIVE EFFECTS-----Not available.
SYNERGISTIC MATERIALS-----Not available.

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IPEX 100 PVC CONDUIT SOLVENT CEMENT (Low VOC)

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SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL-----Not available. Can be dangerous if allowed to enter drinking water intakes. Product has an unaesthetic appearance and can be a nuisance. Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds and rivers.

BIODEGRADABILITY-----Not available. The solvent portion of this product is biodegradable and vaporizes rapidly.

VOC INFORMATION-----This product emits VOC's (volatile organic compounds in use. Always ensure that the use of this product complies with local VOC Emission Regulations, where they exist. The VOC level is 475 grams/litre (SCAQMD Test Method 316A)

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL-----Spilled material and water rinses are classified as chemical waste. To be disposed of in accordance with current Local, Provincial and Federal regulations.

SECTION 14: TRANSPORT INFORMATION

T.D.G. CLASSIFICATION-----

(A)----- (A) In containers up to 5 litres - shipped as CONSUMER COMMODITY. If the shipment exceeds 500 kg in weight, shipped as CONSUMER COMMODITY - ADHESIVES CLASS 3.

(B)----- (B) In containers over 5 litres - ADHESIVES CLASS 3 UN1133 P.G. II.

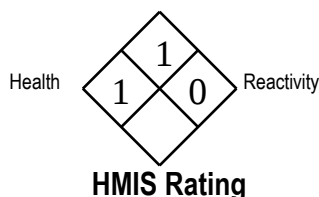
SECTION 15: REGULATORY INFORMATION

CPR COMPLIANCE-----This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS CLASSIFICATION-----Class B Div.2 Flammable Liquid Class D Div.2B Toxic Material.

SECTION 16: OTHER INFORMATION

IMPORTANT:-----The information on this Material Safety Data Sheet is furnished without warranty, expressed or implied. All the information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations for the accuracy or sufficiency.



MATERIAL SAFETY DATA SHEET

GENERAL INFORMATION

PRODUCT NAME OR NUMBER (as it appears on label) Noalox® Anti-Oxidant		CATALOG NUMBER All "30" Series
MANUFACTURER'S NAME IDEAL INDUSTRIES, INC.		EMERGENCY TELEPHONE NO. (815) 895-5181
ADDRESS (Number, Street, City, State, Zip Code) Becker Place, Sycamore, IL 60178		
HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD CLASS, HAZARD CLASS NO., HAZARD ID NO. (49 CFR 172.101) None		
CHEMICAL DESCRIPTION Petroleum-Based Mixture	FORMULA Proprietary	

SECTION I - INGREDIENTS

[illegible]

SECTION II - PHYSICAL DATA

BOILING POINT	SPECIFIC GRAVITY (H ₂ O=1)	PERCENT VOLATILE BY VOLUME (%)
>500 °F °C	1.04	N.F.
SOLUBILITY IN WATER	pH =	PERCENT SOLID BY WEIGHT (%)
Moderate	6.5 - 8.0	100
APPEARANCE AND ODOR	IS MATERIAL: LIQUID SOLID GEL GAS PASTE POWDER	
Gray solid paste, mild odor		

SECTION III - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	310 F	method used	C.O.C	FLAMMABLE LIMITS	LEL	UEL
					N.E.	N.E.
EXTINGUISHING MEDIA						
Use dry chemical, carbon dioxide or foam.						
SPECIAL FIRE FIGHTING PROCEDURES						
Self-contained respiratory protection should be provided for fire fighters. Keep fire exposed						
containers cool with water.						
UNUSUAL FIRE AND EXPLOSION HAZARDS						
Water or foam may cause a frothing reaction. (Water reacts with zinc dust).						

* None of the chemical raw materials contained in this formulation are considered hazardous under the Federal Hazards Communication Standard 29 C. F. R 1910.1200

SECTION IV - HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE - Conditions to Avoid	
None normally expected. Upon prolonged contact, may cause temporary eye discomfort.	
THRESHOLD LIMIT VALUE	
Zinc dust or silicon dioxide as dust: 10mg/m.	
PRIMARY ROUTES OF ENTRY Inhalation ☐ Skin Contact ☒ Other (specify)	
EMERGENCY FIRST AID PROCEDURES	
SKIN CONTACT:	Wash with soap and water for 15 minutes
EYE CONTACT:	Flush with water for 15 minutes
INGESTION:	
Induce vomiting and consult physician or local poison control center.	

SECTION V - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
Avoid conditions of moisture or high humidity.			
INCOMPATIBILITY (materials to avoid)			
Avoid strong oxidizers, strong acids and water.			
HAZARDOUS DECOMPOSITION PRODUCTS:			
Excessive heat and burning may release oxides of carbon.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	
None			

SECTION VI - SPILL AND LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED	
Wipe up, shovel or vacuum spilled material. Clean up spills immediately.	
Use absorbent media.	
WASTE DISPOSAL METHOD	
Comply with Federal, state and local regulations for solid landfill.	
CERCLA (Superfund) REPORTABLE QUANTITY (in lbs)	
None Required	
RCRA HAZARDOUS WASTE NO. (40CFR 261.33)	
None Required	
VOLATILE ORGANIC COMPOUND (VOC) (as packaged, minus water)	
128 g/l, calculated	
³ Theoretical ____ lb/gal	N/A
³ Analytical ____ lb/gal	N/A

SECTION VII - PERSONAL PROTECTION INFORMATION

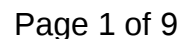
RESPIRATORY PROTECTION (specify type)			
If TLV exceeded, use NIOSH respirator			
VENTILATION	LOCAL EXHAUST (Specify Rate)	Necessary above TLV	SPECIAL None
	MECHANICAL (General) (Specify Rate)	Recommended in closed areas	OTHER None
PROTECTIVE GLOVES (specify type)		EYE PROTECTION (specify type)	
None normally needed - Neoprene if necessary		Safety glasses or splash goggles.	
OTHER PROTECTIVE EQUIPMENT			
Eye fountain in work area is recommended.			

SECTION VIII - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	
Store in dry conditions at temperatures between 40 - 120 F.	
OTHER PRECAUTIONS	
Keep away from children, infants and pets.	

SECTION IX - ADDITIONAL INFORMATION

This product contains the following materials that are subject to the reporting requirements of Section 313 of EPCRA:	
CAS # 7440-66-6. Zinc Dust. 20%	
N/A = Not Applicable, N.E. = None Established	
THIS MATERIAL SAFETY DATA SHEET PREPARED BY:	
NAME	James R. MacMurdo
TITLE	Director, Corporate Quality Assurance
DATE	6/12/13
SIGNATURE	
	



Section 1 – Product & Company Identification

Section 2 – Hazards Identification

GHS Label Elements: Not applicable

This product does not contain silicone or chlorinated additives.

Specific chemical identities and/or exact percentages have been withheld as trade secrets.

INGESTION:

Rinse mouth thoroughly. Call a Poison Center or doctor if you feel unwell. Do NOT induce vomiting.

INHALATION:

Move to fresh air. Call a Poison Center or doctor if you feel unwell.

Product Name : RIDGID Nu-Clear Thread Cutting Oil

SKIN CONTACT:

Remove contaminated/saturated clothing and shoes. Wash contact areas with soap and water. If skin irritation occurs: Get medical advice/attention.

EYE CONTACT:

Flush thoroughly with water. If irritation occurs, get medical assistance. Continue to rinse for at least 15 minutes.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

Symptoms:

No data available.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treatment:

Get medical attention as appropriate or if symptoms persist

Section 5 – Fire Fighting Measures

GENERAL FIRE HAZARDS:

No unusual fire or explosion hazards noted.

SUITABLE (AND UNSUITABLE) EXTINGUISHING MEDIA

Suitable extinguishing media:

No data available.

Unsuitable extinguishing media:

Do not use water jet as an extinguisher, as this will spread the fire.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

Heat may cause the containers to pressurize and possibly rupture. During fire, gases hazardous to health may be formed.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Special firefighting procedures:

No data available.

Special protective equipment for fire-fighters:

Firefighters must use standard protective equipment appropriate for Industrial fires.

Product Name : RIDGID Nu-Clear Thread Cutting Oil

Section 6 – Accidental Release Measures

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

See Section 8 of the SDS for Personal Protective Equipment. Do not handle damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. Ensure adequate ventilation.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

Absorb with sand or other inert absorbent. Stop the flow of material, if this is without risk.

ENVIRONMENTAL PRECAUTIONS:

Avoid release to the environment. Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so and protect against releases into the environment. Remediate as appropriate.

Section 7 – Handling And Storage

PRECAUTIONS FOR SAFE HANDLING:

Observe good industrial hygiene practices. Wear appropriate personal protective equipment. Do not expose to intense heat as product may expand and pressurize container.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Store in original tightly closed container. Avoid contact with oxidizing agents. Store away from incompatible materials.

SHELF LIFE:

720 days

Product Name : RIDGID Nu-Clear Thread Cutting Oil

Section 8 – Exposure Controls / Personal Protection

EXPOSURE LIMITS:

Chemical name	type	Exposure Limit Values	Source
Mineral oil - Mist.	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Vegetable oil - Total dust.	PEL	15 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Vegetable oil - Respirable fraction.	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

PROTECTIVE MEASURES:

Use personal protective equipment as required.

RESPIRATORY PROTECTION:

In case of inadequate ventilation use suitable respirator. Seek advice from supervisor on the company's respiratory protection standards.

EYE PROTECTION:

Wear safety glasses with side shields (or goggles).

SKIN AND BODY PROTECTION:

Wear protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

HYGIENE MEASURES:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Contaminated work clothing should not be allowed out of the workplace. Discard contaminated footwear that cannot be cleaned. Avoid contact with skin, eyes, and clothing.

Product Name : RIDGID Nu-Clear Thread Cutting Oil

Section 9 – Physical And Chemical Properties

Appearance	
Physical State	Liquid
Form	No data available
Color	Yellow
Odor	Mild petroleum
Odor Threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	196 °C (385 °F)
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%)	No data available
Flammability limit - lower (%)	No data available
Explosive limit – upper (%)	No data available
Explosive limit – lower (%)	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	0.878
Solubility(ies)	
Solubility in water	Insoluble
Solubility (other)	No data available
Partition coefficient (n-octanol/water)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	43 mm ² /s (40 °C, measured)
VOC	9.4 g/l

Product Name : RIDGID Nu-Clear Thread Cutting Oil

Section 10 – Stability And Reactivity

REACTIVITY:

Not reactive during normal use.

CHEMICAL STABILITY:

No data available.

POSSIBILITY OF HAZARDOUS REACTIONS:

None under normal conditions.

CONDITIONS TO AVOID:

Avoid heat or contamination.

INCOMPATIBLE MATERIALS:

No data available.

HAZARDOUS DECOMPOSITION PRODUCTS:

Contains a component which may release flammable substances, including trimethylpentene, by distillation in systems with solvent recovery. This may lead to accumulation in the solvent circuit.

Section 11 – Toxicological Information

INFORMATION ON LIKELY ROUTES OF EXPOSURE

Ingestion:

May be ingested by accident. Ingestion may cause irritation and malaise.

Inhalation:

Inhalation is the primary route of exposure. In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.

Skin Contact:

Prolonged skin contact may cause redness and irritation.

Eye contact:

Eye contact is possible and should be avoided.

Product Name : RIDGID Nu-Clear Thread Cutting Oil

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Ingestion:

No data available.

Inhalation:

No data available.

Skin Contact:

No data available.

Eye contact:

No data available.

INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity

Oral Product:

ATEmix (): 2000 - 5000 mg/kg

Dermal Product:

ATEmix (): 2000 - 5000 mg/kg

Inhalation Product:

Not classified for acute toxicity based on available data.

Repeated dose toxicity Product:

No data available.

Skin Corrosion/Irritation Product:

No data available.

Serious Eye Damage/Eye Irritation Product:

No data available.

Respiratory or Skin Sensitization Product:

No data available.

Carcinogenicity Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro Product:

No data available.

In vivo Product:

No data available.

Product Name : RIDGID Nu-Clear Thread Cutting Oil

Reproductive toxicity Product:

No data available.

Specific Target Organ Toxicity - Single Exposure Product:

No data available.

Specific Target Organ Toxicity - Repeated Exposure Product:

No data available.

Aspiration Hazard Product:

No data available.

Other effects:

No data available

Section 12 – Ecological Information

GENERAL INFORMATION:

This product has not been evaluated for ecological toxicity or other environmental effects.

Section 13 – Disposal Consideration

DISPOSAL INSTRUCTIONS:

Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. It is the responsibility of the product user or owner to determine at the time of disposal, which waste regulations must be applied.

CONTAMINATED PACKAGING:

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14 – Transportation Information

This material is not subject to transport regulations.

Product Name : RIDGID Nu-Clear Thread Cutting Oil

Section 15 – Regulatory Information

US FEDERAL REGULATIONS

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories - None

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

US STATE REGULATIONS

US. California Proposition 65

No component is regulated by CA Prop 65.

Section 16 – Other Information

Prepared by:..... Ridge Tool Company

Issue Date: May 29, 2015

Last Revision Date: May 29, 2015

RIDGE TOOL BELIEVES THE STATEMENTS, TECHNICAL INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE RELIABLE BUT THEY ARE GIVEN WITHOUT WARRANTY OR GUARANTEE OF ANY KIND, EXPRESSED OR IMPLIED, AND WE ASSUME NO RESPONSIBILITY FOR ANY LOSS, DAMAGE OR EXPENSE, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THEIR USE.

Safety Data Sheet



1. Identification

Product Name:	IC LSPR 12PK SAFETY GREEN MARKING	Revision Date:	7/9/2018
Product Identifier:	1634838	Supersedes Date:	3/14/2018
Recommended Use:	Marking Paint/ Aerosol		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
	Rust-Oleum Canada (ROCA) 200 Confederation Parkway Concord, ON L4K 4T8 Canada		
Preparer:	Regulatory Department		
Emergency Telephone:	24 Hour Hotline: 847-367-7700		

2. Hazard Identification

Classification

Symbol(s) of Product



Signal Word

Danger

Possible Hazards

37% of the mixture consists of ingredient(s) of unknown acute toxicity.

GHS HAZARD STATEMENTS

Flammable Aerosol, category 1	H222	Extremely flammable aerosol.
Compressed Gas	H280	Contains gas under pressure; may explode if heated.
Carcinogenicity, category 2	H351	Suspected of causing cancer.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Eye Irritation, category 2	H319	Causes serious eye irritation.

GHS LABEL PRECAUTIONARY STATEMENTS

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
P410+P403	Protect from sunlight. Store in a well-ventilated place.
P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local, regional and national regulations.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P264	Wash hands thoroughly after handling.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.

3. Composition / Information On Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt. %</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Acetone	67-64-1	25	GHS02-GHS07	H225-319-332-336
Naphtha, Petroleum, Hydrotreated Light	64742-49-0	17	GHS08	H304
Propane	74-98-6	15	GHS04	H280

n-Butane	106-97-8	7.1	GHS04	H280
Xylenes (o-, m-, p- isomers)	1330-20-7	3.9	GHS02-GHS07	H226-315-319-332
Hydrous Magnesium Silicate	14807-96-6	3.6	Not Available	Not Available
n-Butyl Acetate	123-86-4	3.1	GHS02-GHS07	H226-336
Nanoscale Titanium Dioxide	1317-80-2	2.2	Not Available	Not Available
Ethylbenzene	100-41-4	0.9	GHS02-GHS07-GHS08	H225-304-332-351-373
Titanium Dioxide	13463-67-7	0.8	Not Available	Not Available

4. First-Aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation.

FIRST AID - INGESTION: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

5. Fire-Fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS LESS THAN 20°F. EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can. Closed containers may explode when exposed to extreme heat due to buildup of steam. No unusual fire or explosion hazards noted.

SPECIAL FIREFIGHTING PROCEDURES: Evacuate area and fight fire from a safe distance. Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

Special Fire and Explosion Hazard (Combustible Dust): No Information

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Use only in a well-ventilated area. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing.

STORAGE: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of flammable aerosols. Contents under pressure. Do not expose to heat or store above 120 ° F. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials. Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep away from heat, sparks, flame and sources of ignition. Avoid excess heat.

Advice on Safe Handling of Combustible Dust: No Information

8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Acetone	67-64-1	25.0	250 ppm	500 ppm	1000 ppm	N.E.
Naphtha, Petroleum, Hydrotreated Light	64742-49-0	20.0	N.E.	N.E.	N.E.	N.E.
Propane	74-98-6	15.0	N.E.	N.E.	1000 ppm	N.E.
n-Butane	106-97-8	10.0	N.E.	1000 ppm	N.E.	N.E.
Xylenes (o-, m-, p- isomers)	1330-20-7	5.0	100 ppm	150 ppm	100 ppm	N.E.
Hydrous Magnesium Silicate	14807-96-6	5.0	2 mg/m3	N.E.	N.E.	N.E.
n-Butyl Acetate	123-86-4	5.0	50 ppm	150 ppm	150 ppm	N.E.
Nanoscale Titanium Dioxide	1317-80-2	5.0	N.E.	N.E.	N.E.	N.E.
Ethylbenzene	100-41-4	1.0	20 ppm	N.E.	100 ppm	N.E.
Titanium Dioxide	13463-67-7	1.0	10 mg/m3	N.E.	15 mg/m3	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

SKIN PROTECTION: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection. Use gloves to prevent prolonged skin contact.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application. Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Engineering Measures for Combustible Dust: No Information

9. Physical and Chemical Properties

Appearance:	Aerosolized Mist	Physical State:	Liquid
Odor:	Solvent Like	Odor Threshold:	N.E.
Relative Density:	0.837	pH:	N.A.
Freeze Point, °C:	ND	Viscosity:	N.D.
Solubility in Water:	Slight	Partition Coefficient, n-octanol/water:	N.D.
Decomposition Temp., °C:	N.D.	Explosive Limits, vol%:	0.9 - 13.0
Boiling Range, °C:	-37 - 1,649	Flash Point, °C:	-96
Flammability:	Supports Combustion	Auto-ignition Temp., °C:	N.D.
Evaporation Rate:	Faster than Ether	Vapor Pressure:	N.D.
Vapor Density:	Heavier than Air		

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid temperatures above 120°F (49°C). Avoid all possible sources of ignition.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalis.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological Information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes Serious Eye Irritation

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Prolonged or repeated contact may cause skin irritation. May cause skin irritation. Allergic reactions are possible.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Aspiration hazard if swallowed; can enter lungs and cause damage. Harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. No significant exposure to Titanium Dioxide is thought to occur during the use of products in which Titanium Dioxide is bound to other materials, such as in paints during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. (Ref: IARC Monograph, Vol. 93, 2010) May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
67-64-1	Acetone	5800 mg/kg Rat	>15700 mg/kg Rabbit	50.1 mg/L Rat
64742-49-0	Naphtha, Petroleum, Hydrotreated Light	>5000 mg/kg Rat	>3160 mg/kg Rabbit	>4951 mg/L Rat
106-97-8	n-Butane	N.E.	N.E.	658 mg/L Rat
1330-20-7	Xylenes (o-, m-, p- isomers)	3500 mg/kg Rat	>4350 mg/kg Rabbit	29.08 mg/L Rat
14807-96-6	Hydrous Magnesium Silicate	6000	N.E.	30
123-86-4	n-Butyl Acetate	10768 mg/kg Rat	>17600 mg/kg Rabbit	> 21 mg/L Rat
100-41-4	Ethylbenzene	3500 mg/kg Rat	15400 mg/kg Rabbit	17.4 mg/L Rat
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	2500 mg/kg	N.E.

N.E. - Not Established

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components. Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems. Do not incinerate closed containers. This product as supplied is a USEPA defined ignitable hazardous waste. Dispose of unusable product as a hazardous waste (D001) in accordance with local, state, and federal regulation.

14. Transport Information

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
UN Number:	N.A.	1950	1950	N.A.
Proper Shipping Name:	Paint Products in Limited Quantities	Aerosols	Aerosols	Paint Products in Limited Quantities
Hazard Class:	N.A.	2.1	2.1	N.A.
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	Yes	Yes	Yes	Yes

15. Regulatory Information**U.S. Federal Regulations:****CERCLA - SARA Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Gas under pressure, Carcinogenicity, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
Xylenes (o-, m-, p- isomers)	1330-20-7
Ethylbenzene	100-41-4

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

16. Other Information**HMIS RATINGS**

Health: 2* Flammability: 4 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 4 Instability: 0

Maximum Incremental Reactivity 0.84

SDS REVISION DATE: 7/9/2018

REASON FOR REVISION:

Substance Hazard Threshold % Changed
Substance and/or Product Properties Changed in Section(s):
02 - Hazard Identification
03 - Composition/Information on Ingredients
08 - Exposure Controls/Personal Protection
15 - Regulatory Information
16 - Other Information
Substance Regulatory CAS Number Changed
Substance Hazardous Flag Changed
Substance Chemical Name Changed
Revision Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The manufacturer believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. The manufacturer makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.



Revision date: 7-12-22

Date of issue: 8-07-2018

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Trade name:	YELLOW 77[®] Wire Pulling Lubricant
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SECTION 1: Identification

Product identifier:	YELLOW 77[®] Wire Pulling Lubricant.
Synonyms:	None available.
Product Code Number:	31-358, 31-351, 31-355, 31-365.
SDS number:	ID023
Recommended use:	Wire Pulling Lubricant.
Recommended restrictions:	None known.

Manufacturer/Importer/Supplier/Distributor information:

Company Name:	IDEAL INDUSTRIES, INC.
Company Address:	Becker Place, Sycamore, IL 60178
Company Telephone:	Office hours (Mon – Fri) 7AM - 5 PM (CDT) (815)895-5181
Company Contact Name:	Darryl Docter.
Company Contact Email:	IDEAL@IDEALINDUSTRIES.COM
Emergency phone number:	24 HOUR EMERGENCY NUMBER: (815)895-5181.

SECTION 2: Hazard(s) identification
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Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards

Not classified as a physical hazard under GHS criteria.

Health hazards

Not classified as a health hazard under GHS criteria

Environmental hazards

Not classified as an environmental hazard under GHS criteria.

GHS Signal word:	Not applicable.
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GHS Hazard statement(s):	Not applicable.
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GHS Hazard symbol(s):	Not applicable
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GHS Precautionary statement(s):	
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Prevention:

No prevention precautionary statements required.

Response:

No response precautionary statements required

Storage:

No storage precautionary statements required.

Disposal:

No disposal precautionary statements required.

Hazard(s) not otherwise

Classified (HNO): None known.

Percentage of ingredient(s) of unknown acute toxicity:

Not applicable

SECTION 3: Composition/information on ingredients

Mixture:

Chemical name	CAS#	Concentration (weight %)
None of the chemical raw materials contained in this formulation are considered hazardous under the Federal Hazards Communication Standard 29 C. F. R 1910.1200		

SECTION 4: First-aid Measures

Description of necessary measures:

Inhalation: Move to fresh air. Get medical attention if symptoms develop.

Skin contact: Wash off with warm water and soap for 15 minutes. Get medical attention if irritation develops or persists.

Eye contact: Flush eyes with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

Ingestion: Induce vomiting. Consult physician or local poison control center.

Most important symptoms/effects, acute and delayed: None normally expected. Upon prolonged contact, may cause temporary eye discomfort. If material is used in extreme heat (>120° F), prolonged and repeated exposure could pose a risk of pulmonary disease.

Indication of immediate medical attention and special treatment needed: If any symptoms are observed, contact a physician and give them this SDS sheet.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: Not flammable by OSHA criteria. Use extinguishing media suitable for surrounding materials.

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical: None expected.

Combustion products - Excessive heat and burning may release oxides of carbon and nitrogen.

Special protective equipment and precautions for fire-fighters: Containers should be cooled with water to prevent vapor pressure build up. Cool containers with flooding quantities of water until well after fire is out. Move containers from fire area if you can do so without risk. For fire involving this material, do not enter any enclosed or confined fire space without proper protective equipment. Use self-contained breathing apparatus with full face shield to protect against the hazardous effects of combustion products and oxygen deficiencies.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

Methods and material for containment and cleaning up:

Wipe up, shovel or vacuum spilled material. Clean up spills immediately as they can be dangerously slippery.

SECTION 7: Handling and Storage

Precautions for safe handling: Keep away from children, infants and pets. Avoid contact with skin. Avoid contact with eyes. Wear personal protective equipment. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).

Conditions for safe storage, including any incompatibles:

Store at temperatures between 40 - 120° F. Avoid freezing.

SECTION 8: Exposure controls/personal protection

Control Parameters:

Occupational exposure limits:

US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200): Permissible Exposure Limits		
Substance	PEL-TWA (8 hour)	PEL-STEEL (15 min)
Not applicable		

US ACGIH Threshold Limit Values		
Substance	TLV-TWA (8 hour)	TLV-STEEL (15 min)
Not applicable		

USA. Workplace Environmental Exposure Levels (WEEL)		
Substance	TWA	STEEL
Not applicable		

Appropriate engineering controls: General (mechanical) room ventilation is expected to be adequate. Special local ventilation is recommended to keep mists below exposure limits. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Individual protection measures, such as personal protective equipment:

Eye/face protection: The use of safety glasses or splash goggles are recommended. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US).

Skin and Hand protection: None normally required. If worn, use neoprene. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection: No personal respiratory protective equipment normally required.

Other: Eye fountain in work area is recommended.

Thermal hazards: No data available.

SECTION 9: Physical and chemical properties

Appearance

Physical state:	Paste
Form:	Yellow creamy paste.
Color:	Yellow.
Odor:	Slight odor.
Odor threshold:	No data available
pH:	6.5-8.0.
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	212°F 100°C
Flash point:	None
Evaporation rate:	No data available
Flammability (solid, gas):	The product is not flammable.
Upper/lower flammability or explosive limits	
Flammability limit – lower %:	Not applicable
Flammability limit – upper %:	Not applicable
Explosive limit – lower %:	Not applicable
Explosive limit – upper %:	Not applicable
Vapor pressure:	No data available
Vapor density:	No data available
Relative Density:	0.97-0.99
Solubility(ies):	Moderate
Partition coefficient (n-octanol/water):	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	81000 cps @ 1 rpm 158°F 87500 cps @ 1 rpm 77°F
Other information:	
Percent volatile by volume (%):	< 90%
Percent solid by weight:	~20%

SECTION 10: Stability and Reactivity

Reactivity:	Not chemically reactive.
Chemical stability:	Stable under normal ambient and anticipated conditions of use.
Possibility of hazardous reactions:	Hazardous reactions not anticipated.
Conditions to avoid:	None expected.
Incompatible materials:	Avoid strong oxidizers.
Hazardous decomposition Products:	Excessive heat and burning may release oxides of carbon and nitrogen.

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation:	Not an expected route of entry.
Ingestion:	Not an expected route of entry.
Skin:	Skin contact is a primary route of entry.
Eyes:	Not an expected route of entry.

Symptoms related to the physical, chemical, and toxicological characteristics:

None normally expected. If material is used in extreme heat (>120° F), prolonged and repeated exposure could pose a risk of pulmonary disease.

Delayed and immediate effects and chronic effects from short or long-term exposure:

Upon prolonged contact, may cause temporary eye discomfort.

Numerical measures of toxicity:

Ingredient Information:

Substance	Test Type (species)	Value
Not applicable	LD ₅₀ Oral (Rat)	
	LD ₅₀ Dermal (Rabbit)	
	LC ₅₀ Inhalation (Rat)	

Product Acute Toxicity Estimates:

Acute Oral Toxicity – no data available
Acute Dermal Toxicity - no data available
Acute Inhalation Toxicity - no data available

Skin corrosion/irritation: No information available on the mixture, however none of the components have been classified as skin corrosive/irritant (or are below the concentration threshold for classification).

Serious eye damage/eye irritation: No information available on the mixture, however none of the components have been classified as causing eye damage/eye irritation (or are below the concentration threshold for classification).

Respiratory sensitization: No information available on the mixture, however none of the components have been classified as a respiratory sensitizer (or are below the concentration threshold for classification).

Skin sensitization: No information available on the mixture, however none of the components have been classified as a skin

sensitizer (or are below the concentration threshold for classification).

Germ cell mutagenicity:

No information available on the mixture, however none of the components have been classified for germ cell mutagenicity (or are below the concentration threshold for classification).

Carcinogenicity:

No information available on the mixture, however none of the components are listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.

Reproductive toxicity:

No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification).

**Specific target organ toxicity-
Single exposure:**

No information available on the mixture, however none of the components have been classified for STOT SE (or are below the concentration threshold for classification).

**Specific target organ toxicity-
Repeat exposure:**

No information available on the mixture, however none of the components have been classified for STOT RE (or are below the concentration threshold for classification).

Aspiration hazard:

No information available on the mixture, however none of the components have been classified for Aspiration hazard (or are below the concentration threshold for classification).

Further information:

No data available.

SECTION 12: Ecological information

Ecotoxicity:

Product data: No data available

Ingredient Information:

Substance	Test Type	Species	Value
Not applicable	LC ₅₀	Fish	
	LC ₅₀	Aquatic Invertebrates	
	EC ₅₀	Algae	

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal instructions:

This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.

See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties.

SECTION 14: Transport Information

US Department of Transportation Classification (49CFR)

This material is not classified as dangerous under DOT regulations.

IMDG

This material is not classified as dangerous under IMDG regulations.

IATA (Country variations may apply)

This material is not classified as dangerous under IATA regulations

Environmental hazards

Marine pollutant: No.

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

No further relevant information available.

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

None.

SECTION 15: Regulatory Information

Safety, health and environmental regulations specific for the product.

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is not hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All substances in this product are exempt from the TSCA inventory.

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311,312 and 313:

Section 302 – No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

CERCLA Hazardous Substance List, 40 CFR 302.4:

None listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None listed.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): None listed.

SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None listed.

Section 311/312 (40 CFR 370):

Acute Health Hazard: No

Chronic Health Hazard: No

Fire Hazard: No

Pressure Hazard: No

Reactivity Hazard: No

Section 313 Toxic Release Inventory (40 CFR 372):

This product contains the following materials that are subject to the reporting requirements of Section 313 of EPCRA: None

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986: No components are listed on Prop 65 as a carcinogen.

Massachusetts Right to Know: No components are listed on the Massachusetts Right to Know List.

New Jersey Right to Know: No components are listed on the New Jersey Right to Know list.

Pennsylvania Right to Know: No components are listed on the Pennsylvania Right to Know List.

Canada WHMIS Hazard Class: Not applicable.

SECTION 16: Other information, including date of preparation or last revision.

Revision Date: August 7, 2018

To the best of our knowledge, the information contained herein is accurate. However IDEAL INDUSTRIES INC. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.