



## Single Seal and Freeze Protect

Version 1.0      Revision Date: 08/17/2015      Date of last issue: 08/17/2015  
Date of first issue: 12/15/2014

### SECTION 1. IDENTIFICATION

Product name : Single Seal and Freeze Protect

Product code : XGAL-SSFP-XXXX

#### Manufacturer or supplier's details

Company name of supplier : Professional Products Direct, Inc.

Address : 6771 Eastside Rd., Redding, CA. 96601

Telephone : (888) 389 - 3329

Emergency telephone : (888) 389 - 3329

#### Recommended use of the chemical and restrictions on use

Recommended use : Sealant and curing agent

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

Skin corrosion : Category 1

Serious eye damage : Category 1

#### GHS Label element

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H314 Can cause severe skin burns and eye damage.  
H318 Can cause serious eye damage.

Precautionary Statements : **Prevention:**  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304 + P340 + P310 IF INHALED: Remove person to fresh air



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and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

P363 Wash contaminated clothing before reuse.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Silicone resin solution

**Hazardous ingredients**

Chemical Name	CAS-No.	Concentration (%)
Potassium methylsilanetriolate	31795-24-1	>= 4 - < 50
Methanol	67-56-1	>= .014 - < 1

### SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.  
If not breathing, give artificial respiration.  
If breathing is difficult, give oxygen.  
Get medical attention immediately.

In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.  
Get medical attention immediately.  
Wash clothing before reuse.  
Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.  
If easy to do, remove contact lens, if worn.  
Get medical attention immediately.



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If swallowed	: If swallowed, DO NOT induce vomiting. If vomiting occurs have person lean forward. Call a physician or poison control center immediately. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	: Can cause serious eye damage. Can cause severe burns. Can cause digestive tract burns.
Protection of first-aiders	: First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.
Notes to physician	: Treat symptomatically and supportively.

### SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Water spray Alcohol-resistant foam Dry chemical Carbon dioxide (CO <sub>2</sub> )
Unsuitable extinguishing media	: None known.
Specific hazards during fire fighting	: Exposure to combustion products may be a hazard to health.
Hazardous combustion products	: Carbon oxides Silicon oxides Metal oxides Formaldehyde
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.
Special protective equipment for fire-fighters	: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.
Environmental precautions	: Discharge into the environment must be avoided.



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Prevent further leakage or spillage if safe to do so.  
Prevent spreading over a wide area (e.g. by containment or oil barriers).  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material.  
For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.  
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

### SECTION 7. HANDLING AND STORAGE

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use with local exhaust ventilation.

Advice on safe handling : Do not get on skin or clothing.  
Do not breathe vapors or spray mist.  
Do not swallow.  
Do not get in eyes.  
Handle in accordance with good industrial hygiene and safety practice.  
Keep container tightly closed.  
Take care to prevent spills, waste and minimize release to the environment.

Conditions for safe storage : Keep in properly labeled containers.  
Store locked up.  
Keep tightly closed.  
Store in accordance with the particular national regulations.

Materials to avoid : Do not store with the following product types:  
Strong oxidizing agents  
Organic peroxides  
Explosives

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type	Control parame-	Basis
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		(Form of exposure)	ters / Permissible concentration	
Methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m <sup>3</sup>	NIOSH REL
		ST	250 ppm 325 mg/m <sup>3</sup>	NIOSH REL
		TWA	200 ppm 260 mg/m <sup>3</sup>	OSHA Z-1

### Hazardous components without workplace control parameters

Ingredients	CAS-No.
Potassium methylsilanetriolate	31795-24-1

### Biological occupational exposure limits

Ingredients	CAS-No.	Control parameters	Biological specimen	Sam-pling time	Permissible concentra-tion	Basis
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI

**Engineering measures** : Processing may form hazardous compounds (see section 10).  
Minimize workplace exposure concentrations.  
Use with local exhaust ventilation.

### Personal protective equipment

**Respiratory protection** : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

**Hand protection**  
**Material** : Rubber or plastic gloves

**Remarks** : Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often!



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For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Eye protection	: Wear the following personal protective equipment: Chemical resistant goggles must be worn. If splashes are likely to occur, wear: Face-shield
Skin and body protection	: Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
Hygiene measures	: Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions. For further information regarding the use of silicones / organic oils in consumer aerosol applications, please refer to the guidance document regarding the use of these type of materials in consumer aerosol applications that has been developed by the silicone industry ( <a href="http://www.SEHSC.com">www.SEHSC.com</a> ) or contact the Dow Corning customer service group.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: colorless
Odor	: No data available
Odor Threshold	: No data available
pH	: 13
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: > 64 °C
Flash point	: > 100 °C Method: closed cup
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable



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Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: 1.29
Solubility(ies)	
Water solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: 10 cSt
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Molecular weight	: No data available

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### SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Use at elevated temperatures may form highly hazardous compounds. Can react with strong oxidizing agents. Hazardous decomposition products will be formed at elevated temperatures.
Conditions to avoid	: None known.
Incompatible materials	: Oxidizing agents Acids
Hazardous decomposition products	
Thermal decomposition	: Formaldehyde



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### SECTION 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

Inhalation  
Skin contact  
Ingestion  
Eye contact

#### Acute toxicity

Not classified based on available information.

#### Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : > 40 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

#### Ingredients:

##### **Potassium methylsilanetriolate:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute oral toxicity  
Remarks: Based on test data

##### **Methanol:**

Acute oral toxicity : Acute toxicity estimate (Humans): 300 mg/kg  
Method: Expert judgment

Acute inhalation toxicity : Acute toxicity estimate (Humans): 3 mg/l  
Test atmosphere: vapor  
Method: Expert judgment

Acute dermal toxicity : Acute toxicity estimate (Humans): 300 mg/kg  
Method: Expert judgment

#### **Skin corrosion/irritation**

Causes severe burns.

#### Ingredients:

##### **Potassium methylsilanetriolate:**

Result: Corrosive after 3 minutes or less of exposure  
Remarks: Information taken from reference works and the literature.

##### **Methanol:**

Species: Rabbit  
Result: No skin irritation





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### Serious eye damage/eye irritation

Causes serious eye damage.

#### Ingredients:

##### **Potassium methylsilanetriolate:**

Result: Irreversible effects on the eye

Remarks: Expert judgment

##### **Methanol:**

Species: Rabbit

Result: No eye irritation

### Respiratory or skin sensitization

Skin sensitization: Not classified based on available information.

Respiratory sensitization: Not classified based on available information.

#### Ingredients:

##### **Methanol:**

Test Type: Maximization Test (GPMT)

Routes of exposure: Skin contact

Species: Guinea pig

Result: negative

### Germ cell mutagenicity

Not classified based on available information.

#### Ingredients:

##### **Potassium methylsilanetriolate:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on test data

Genotoxicity in vitro : Test Type: Mammalian erythrocyte micronucleus test (in vitro  
cytogenetic assay)  
Test species: Mouse  
Application Route: Ingestion  
Result: negative  
Remarks: Based on data from similar materials

Germ cell mutagenicity-  
Assessment : Animal testing did not show any mutagenic effects.

##### **Methanol:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

: Test Type: In vitro mammalian cell gene mutation test  
Method: OECD Test Guideline 476  
Result: negative



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Genotoxicity in vitro : Test Type: Mammalian erythrocyte micronucleus test (in vitro cytogenetic assay)  
 Test species: Mouse  
 Application Route: Intraperitoneal injection  
 Result: negative

### Carcinogenicity

Not classified based on available information.

### Ingredients:

#### **Methanol:**

Species: Mouse  
 Application Route: inhalation (vapor)  
 Exposure time: 18 Months  
 Method: OECD Test Guideline 453  
 Result: negative

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

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

### Reproductive toxicity

Not classified based on available information.

### Ingredients:

#### **Potassium methylsilanetriolate:**

Effects on fertility : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test  
 Species: Rat, male and female  
 Application Route: Ingestion  
 Symptoms: No effects on fertility.  
 Remarks: Based on data from similar materials

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test  
 Species: Rat, male and female  
 Application Route: Ingestion  
 Symptoms: No effects on fetal development.  
 Remarks: Based on data from similar materials

Reproductive toxicity - As sessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

#### **Methanol:**

Effects on fertility : Test Type: Fertility/early embryonic development



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Species: Mouse  
Application Route: Ingestion  
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development  
Species: Mouse  
Application Route: Ingestion  
Method: OECD Test Guideline 414  
Result: positive  
Remarks: The effects were seen only at maternally toxic doses.

### STOT-single exposure

Not classified based on available information.

#### Ingredients:

##### **Methanol:**

Target Organs: Eyes, Central nervous system  
Assessment: Causes damage to organs.

### STOT-repeated exposure

Not classified based on available information.

#### Ingredients:

##### **Potassium methylsilanetriolate:**

Routes of exposure: Ingestion  
Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

Routes of exposure: inhalation (vapor)

Assessment: No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or less.

### Repeated dose toxicity

#### Ingredients:

##### **Potassium methylsilanetriolate:**

Species: Rat  
Application Route: Ingestion  
Remarks: Based on data from similar materials

Species: Rat  
Application Route: inhalation (vapor)  
Remarks: Based on data from similar materials

##### **Methanol:**

Species: Rat  
NOAEL: 1.06 mg/l  
Application Route: inhalation (vapor)  
Exposure time: 90 d



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### Aspiration toxicity

Not classified based on available information.

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Ingredients:

##### **Potassium methylsilanetriolate:**

Toxicity to bacteria : EC50: > 100 mg/l  
Method: OECD Test Guideline 209

##### **Methanol:**

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 15,400 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l  
Exposure time: 48 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 22,000 mg/l  
Exposure time: 96 h  
Method: OPPTS 850.5400

Toxicity to fish (Chronic toxicity) : NOEC (Oryzias latipes (Orange-red killifish)): 15,800 mg/l  
Exposure time: 200 h

Toxicity to bacteria : EC50: 20,000 mg/l  
Exposure time: 15 h

### Persistence and degradability

#### Ingredients:

##### **Methanol:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 95 %  
Exposure time: 20 d

### Bioaccumulative potential

#### Ingredients:

##### **Potassium methylsilanetriolate:**

Partition coefficient: n-octanol/water : log Pow: -2.36

##### **Methanol:**

Bioaccumulation : Species: Leuciscus idus (Golden orfe)  
Bioconcentration factor (BCF): < 10

Partition coefficient: n-octanol/water : log Pow: -0.77



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### Mobility in soil

No data available

### Other adverse effects

No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Resource Conservation and Recovery Act (RCRA) : When a decision is made to discard this material as supplied, it is classified as a RCRA hazardous waste.

Waste Code : D002: Corrosivity

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14. TRANSPORT INFORMATION

### International Regulation

#### UNRTDG

UN number : UN 1719  
 Proper shipping name : Caustic Alkali Liquid, n.o.s.  
 (Potassium methylsilanetriolate)  
 Class : 55 Non-Hazardous  
 Packing group : II  
 Labels : 8

#### IATA-DGR

UN/ID No. : UN 1719  
 Proper shipping name : Caustic Alkali Liquid, n.o.s.  
 (Potassium methylsilanetriolate)  
 Class : 55 Non-Hazardous  
 Packing group : II  
 Labels : Corrosive  
 Packing instruction (cargo aircraft) : 855  
 Packing instruction (passenger aircraft) : 851

#### IMDG-Code

UN number : UN 1719  
 Proper shipping name : Caustic Alkali Liquid, n.o.s.  
 (Potassium methylsilanetriolate)  
 Class : 55 Non-Hazardous



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Packing group : II  
 Labels : 8  
 EmS Code : F-A, S-B  
 Marine pollutant : no

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

Not applicable for product as supplied.

### Domestic regulation

#### 49 CFR

UN/ID/NA number : UN 1719  
 Proper shipping name : Caustic Alkali Liquid, n.o.s.  
 (Potassium methylsilanetriolate)  
 Class : 55 Non-Hazardous  
 Packing group : II  
 Labels : CORROSIVE  
 ERG Code : 154  
 Marine pollutant : no

## SECTION 15. REGULATORY INFORMATION

### EPCRA - Emergency Planning and Community Right-to-Know

#### CERCLA Reportable Quantity

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Methanol	67-56-1	5000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard

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

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### US State Regulations

#### Pennsylvania Right To Know

Water	7732-18-5	50 - 96	%
Potassium methylsilanetriolate	31795-24-1	4 - 50	%
Methanol	67-56-1	0.014 - 1	%

#### New Jersey Right To Know

Water	7732-18-5	50 - 96	%
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Potassium methylsilanetriolate	31795-24-1	4 - 50 %
Methanol	67-56-1	0.014 - 1 %

### California Prop 65

WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

Methanol	67-56-1
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### The ingredients of this product are reported in the following inventories:

NZIoC	: All ingredients listed or exempt.
REACH	: All ingredients (pre-)registered or exempt.
TSCA	: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
AICS	: All ingredients listed or exempt.
IECSC	: All ingredients listed or exempt.
ENCS/ISHL	: All components are listed on ENCS/ISHL or exempted from inventory listing.
KECI	: All ingredients listed, exempt or notified.
DSL	: All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).
PICCS	: All ingredients listed or exempt.

### Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

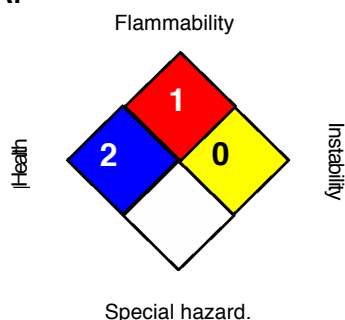


## Single Seal and Freeze Protect

### SECTION 16. OTHER INFORMATION

#### Further information

##### NFPA:



##### HMIS III:

<b>HEALTH</b>	<b>2</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

#### Full text of other abbreviations

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	: ACGIH - Biological Exposure Indices (BEI)
NIOSH REL	: USA. NIOSH Recommended Exposure Limits
OSHA Z-1	: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	: 8-hour, time-weighted average
ACGIH / STEL	: Short-term exposure limit
NIOSH REL / TWA	: Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	: STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA Z-1 / TWA	: 8-hour time weighted average
Sources of key data used to compile the Material Safety Data Sheet	: Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a>
Revision Date	: 08/17/2015

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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