

Material Name: Water Cut-Off Mastic Product #: 319621

#### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name: Water Cut-Off Mastic

**Synonyms:** Butyl Mastic **Chemical Family:** Mastic

**Product Use:** Elastomeric sealer for Single-Ply Membranes

Restrictions on Use: For industrial use only.

**Manufacturer Information** 

Carlisle SynTec 1285 Ritner Highway Carlisle, PA 17013

USA

Phone: +1-800-479-6832

Emergency Phone #: +1-800-424-9300 (CHEMTREC)

#### Section 2 - HAZARDS IDENTIFICATION

## Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

Flammable Liquids - Category 2 Skin Corrosion/Irritation - Category 2 Specific Target Organ Toxicity - Single Exposure - Category 3

#### **GHS Label Elements**

#### Symbol(s)





## Signal Word

Danger

## **Hazard Statement(s)**

Highly flammable liquid and vapor Causes skin irritation May cause drowsiness or dizziness

#### **Precautionary Statement(s)**

#### **Prevention**

Keep container tightly closed

Keep away from heat/sparks/open flame/hot surfaces - No smoking

Ground/Bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting equipment

Take precautionary measures against static discharge

Use only non-sparking tools



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Use only outdoors or in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapours/spray

Wash thoroughly after handling

#### Response

In case of fire: Use appropriate media to extinguish

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing

IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower

If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse Call a POISON CENTER or doctor if you feel unwell

Specific treatment (see label)

#### **Storage**

Store in a well-ventilated place. Keep container tightly closed

Keep cool

Store locked up

## **Disposal**

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

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| CAS          | Component Name                              | Percent |
|--------------|---|---------|
| Trade Secret | Silica compound                             | 1-5     |
| Trade Secret | Polyphenol antioxidant                      | < 0.1   |
| Trade Secret | Severely hydrotreated paraffinic oil        | 1-5     |
| Trade Secret | Polybutene                                  | 10-30   |
| 64742-89-8   | Solvent naphtha, petroleum, light aliphatic | 10-30   |
| Mixture      | Hydrous clay                                | 3-7     |

#### Section 4 - FIRST AID MEASURES

#### **Inhalation**

Remove person to fresh air and keep comfortable for breathing. Give artificial respiration if not breathing. Call a POISON CENTER or doctor if you feel unwell.

#### Skin

Remove/Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation occurs, get medical advice/attention.

#### Eyes

Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

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#### **Ingestion**

If swallowed, do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

## Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

## **Most Important Symptoms/Effects**

#### Acute

Causes skin irritation. May cause drowsiness or dizziness.

#### **Delayed**

No information on significant adverse effects.

#### Section 5 - FIREFIGHTING MEASURES

#### **Extinguishing Media**

## **Suitable Extinguishing Media**

Dry chemical, foam or carbon dioxide. Water may be ineffective. Use water spray to keep containers cool.

#### **Unsuitable Extinguishing Media**

Do not use high-pressure water streams.

#### **Special Hazards Arising from the Chemical**

Highly flammable liquid and vapor. Can burn and explode easily when exposed to open flames or high heat. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flashback.

#### **Hazardous Combustion Products**

Oxides of carbon, aldehydes

#### **Firefighting Measures**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

#### Section 6 - ACCIDENTAL RELEASE MEASURES

## Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

#### **Methods and Materials for Containment and Cleaning Up**

Remove all sources of ignition. Avoid breathing vapors. Ventilate affected area. Absorb with earth, sand or other non-combustible material and transfer to container. Use non-sparking tools. Dike for later disposal. Dispose in accordance with all applicable regulations.

#### **Environmental Precautions**

Avoid release to the environment.

#### Section 7 - HANDLING AND STORAGE

## **Precautions for Safe Handling**

Keep away from heat/sparks/open flames/hot surfaces. Take precautionary measures against static discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe

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dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. KEEP OUT OF REACH OF CHILDREN.

## Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep container tightly closed

Keep cool

Store locked up

Keep away from heat and ignition sources. Keep away from incompatible materials. Do not cut, puncture, or weld on or near this container.

## **Incompatible Materials**

Strong oxidizing agents, acids, bases

# Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

## **Component Exposure Limits**

| Calcium carbonate      | 1317-65-3  |                                     |  |
|------------------------|--|-------------------------------------|--|
| NIOSH:                 | 10 mg/m³ TWA total dust; 5 mg/m³ TWA respirable dust   |                                     |  |
| OSHA (US):             | 15 mg/m³ TWA total dust; 5 mg/m³ TWA respirable  | e fraction                          |  |
| Mexico:                | 10 mg/m³ TWA LMPE-PPT  | 20 mg/m <sup>3</sup> STEL [LMPE-CT] |  |
| Silica<br>compound     | Trade Secret   |                                     |  |
| OSHA (US):             | 20 mppcf TWA; ((80)/(% SiO2) mg/m <sup>3</sup> TWA)  |                                     |  |
| Mexico:                | 10 mg/m³ TWA LMPE-PPT  |                                     |  |
|                        |  |                                     |  |
| Carbon compound        | Trade Secret   |                                     |  |
| ACGIH:                 | 3 mg/m <sup>3</sup> TWA inhalable fraction   |                                     |  |
| NIOSH:                 | 3.5 mg/m³ TWA; 0.1 mg/m³ TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons) as PAH |                                     |  |
|                        | 1750 mg/m³ IDLH  |                                     |  |
| OSHA (US):             | 3.5 mg/m <sup>3</sup> TWA  |                                     |  |
| Mexico:                | 3.5 mg/m <sup>3</sup> TWA LMPE-PPT   | 7 mg/m³ STEL [LMPE-CT]              |  |
| Silica,<br>crystalline | 14808-60-7   |                                     |  |



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| ACGIH:     | 0.025 mg/m³ TWA respirable fraction  |  |  |
|------------|--|--|--|
| NIOSH:     | 0.05 mg/m³ TWA respirable dust 50 mg/m³ IDLH respirable dust   |  |  |
| OSHA (US): | $\frac{((30)/(\% SiO2+2) \ mg/m^3 \ TWA) \ total \ dust;}{((10)/(\% SiO2+2) \ mg/m^3 \ TWA) \ total \ dust;} \\ ((250)/(\% SiO2+5) \ mppcf \ TWA) \ respirable \ fraction;}$ |  |  |
| Mexico:    | 0.1 mg/m <sup>3</sup> TWA LMPE-PPT respirable fraction   |  |  |

#### **Biological limit value**

There are no biological limit values for any of this product's components.

## **Engineering Controls**

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

## Individual Protection Measures, such as Personal Protective Equipment

## **Eye/face protection**

Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### **Skin Protection**

Wear chemical resistant clothing and rubber boots when potential for contact with the material exists. Recommended material: protective skin cream.

## **Respiratory Protection**

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

#### **Glove Recommendations**

Wear appropriate chemical resistant gloves.

#### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

| Appearance                   | gray viscous liquid | Physical State                         | liquid                    |  |
|------------------------------|---------------------|--|---------------------------|--|
| Odor                         | mild, solvent       | Color                                  | gray                      |  |
| Odor Threshold               | Not available       | рН                                     | Not available             |  |
| <b>Melting Point</b>         | Not available       | <b>Boiling Point</b>                   | 119 - 141 °C (246-286 °F) |  |
| Freezing point               | Not available       | <b>Evaporation Rate</b>                | 3.5                       |  |
| <b>Boiling Point Range</b>   | Not available       | Flammability (solid, gas)              | Not available             |  |
| Autoignition                 | 246 °C (475 °F)     | Flash Point                            | 10 °C (50 °F)             |  |
| <b>Lower Explosive Limit</b> | 0.9 %               | Decomposition                          | Not available             |  |
| <b>Upper Explosive Limit</b> | 6.7 %               | Vapor Pressure                         | 11.25 mmHg                |  |
| Vapor Density (air=1)        | 4                   | Specific Gravity (water=1)             | Not available             |  |
| Water Solubility             | 0.5                 | Partition coefficient: n-octanol/water | Not available             |  |
| Viscosity                    | 1200000 cps         | Solubility (Other)                     | hydrocarbons              |  |

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**Density** 1.2 - 1.3 (relative) **VOC** 250 g/L

#### **Other Information**

No additional information available.

#### Section 10 - STABILITY AND REACTIVITY

#### Reactivity

No reactivity hazard is expected.

## **Chemical Stability**

Stable under normal conditions of use.

## **Possibility of Hazardous Reactions**

Hazardous polymerization will not occur.

#### **Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

#### **Incompatible Materials**

Strong oxidizing agents, acids, bases.

## **Hazardous decomposition products**

Oxides of carbon, aldehydes

## Section 11 - TOXICOLOGICAL INFORMATION

#### **Information on Likely Routes of Exposure**

#### Inhalation

May cause drowsiness or dizziness.

#### **Skin Contact**

Causes skin irritation.

#### **Eve Contact**

May cause eye irritation.

#### **Ingestion**

May cause gastrointestinal irritation.

#### **Acute and Chronic Toxicity**

#### **Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Carbon compound (Trade Secret)

Oral LD50 Rat >8000 mg/kg

Polyphenol antioxidant (Trade Secret)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >5000 mg/kg



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Severely hydrotreated paraffinic oil (Trade Secret)
Oral LD50 Rat >5000 mg/kg
Dermal LD50 Rabbit >2000 mg/kg

Polybutene (Trade Secret)

Oral LD50 Rat >34600 mg/kg Dermal LD50 Rat >10250 mg/kg

Solvent naphtha, petroleum, light aliphatic (64742-89-8)

Oral LD50 Rat >2000 mg/kg Dermal LD50 Rat >2000 mg/kg

Silica, crystalline (14808-60-7)

Oral LD50 Rat 500 mg/kg

#### **Immediate Effects**

Causes skin irritation. May cause drowsiness or dizziness. May cause gastrointestinal irritation.

## **Delayed Effects**

No information on significant adverse effects.

#### **Irritation/Corrosivity Data**

Causes skin irritation. May cause gastrointestinal irritation.

## **Respiratory Sensitization**

No data available.

#### **Dermal Sensitization**

No data available.

## Component Carcinogenicity

| Component Carcino   | gementy   |
|---------------------|---|
| Silica compound     | Trade Secret  |
| IARC:               | Monograph 68 [1997] (Group 3 (not classifiable))                                      |
|                     |   |
| Carbon compound     | Trade Secret  |
| ACGIH:              | A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans                     |
| IARC:               | Monograph 93 [2010]; Monograph 65 [1996] (Group 2B (possibly carcinogenic to humans)) |
| DFG:                | Category 3B (could be carcinogenic for man, inhalable fraction)                       |
| OSHA:               | Present   |
|                     |   |
| Silica, crystalline | 14808-60-7  |
| ACGIH:              | A2 - Suspected Human Carcinogen   |
| IARC:               | Monograph 100C [2012]; Monograph 68 [1997] (Group 1 (carcinogenic to humans))         |
| NTP:                | Known Human Carcinogen (respirable size)  |

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| DFG:  | Category 1 (causes cancer in man, alveola fraction) |
|-------|---|
| OSHA: | Present (respirable size)                           |

#### **Germ Cell Mutagenicity**

No data available.

## **Reproductive Toxicity**

No data available.

## **Specific Target Organ Toxicity - Single Exposure**

May affect the central nervous nervous system: drowsiness, dizziness.

## **Specific Target Organ Toxicity - Repeated Exposure**

No target organs identified.

## **Aspiration hazard**

No data available.

# **Medical Conditions Aggravated by Exposure**

No data available.

#### **Additional Data**

This product contains crystalline silica, which is a known carcinogen. However, this component is bound by the polymer portion of the sealant. The only way this component would be released is through incineration. Therefore, this product is not considered a carcinogen.

#### Section 12 - ECOLOGICAL INFORMATION

## **Ecotoxicity**

Avoid release to the environment.

## **Component Analysis - Aquatic Toxicity**

| Polyphenol antioxidant               | Trade Secret   |
|--------------------------------------|--|
| Fish:                                | LC50 96 h Oncorhynchus mykiss >0.2 mg/L [semi-static]      |
| Algae:                               | EC50 72 h Pseudokirchneriella subcapitata >0.2 mg/L IUCLID |
| Invertebrate:                        | EC50 48 h Daphnia magna >0.2 mg/L IUCLID                   |
|                                      |  |
| Severely hydrotreated paraffinic oil | Trade Secret   |
| Fish:                                | LC50 96 h Oncorhynchus mykiss >5000 mg/L                   |
| Invertebrate:                        | EC50 48 h Daphnia magna >1000 mg/L IUCLID                  |
|                                      |  |
| Polybutene                           | Trade Secret   |
| Fish:                                | Fish LC50 96 hr >1000 mg/L                                 |



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| Solvent naphtha, petroleum, light aliphatic | 64742-89-8   |
|---|--|
| Algae:                                      | EC50 72 h Pseudokirchneriella subcapitata 4700 mg/L IUCLID |
|   |  |
| Hydrous clay                                | Mixture  |
| Fish:                                       | Fish LC50 96 hr Oncorhynchus 19000 mg/L                    |

## **Persistence and Degradability**

No information available for the product.

#### **Bioaccumulative Potential**

No information available for the product.

## **Mobility**

No information available for the product.

## **Other Toxicity**

No additional information available.

## Section 13 - DISPOSAL CONSIDERATIONS

#### **Disposal Methods**

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

#### Section 14 - TRANSPORT INFORMATION

**US DOT Information:** 

**Shipping Name:**ADHESIVES

Hazard Class: 3 UN/NA #: UN1133 Packing Group: II

**Required Label(s):** < 0.3 gal use Limited Quantity Label

**IATA Information:** 

**Shipping Name:**ADHESIVES

Hazard Class: 3 UN#: UN1133 Packing Group: II

**Required Label(s):** < 0.3 gal use Limited Quantity Label

**TDG Information:** 

**Shipping Name:** ADHESIVES

Hazard Class: 3 UN#: UN1133 Packing Group: II



Material Name: Water Cut-Off Mastic Product #: 319621

**Required Label(s):** 

## Section 15 - REGULATORY INFORMATION

#### **U.S. Federal Regulations**

None of this products components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

## SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: Yes Chronic Health: Yes Fire: Yes Pressure: No Reactivity: No

#### **U.S. State Regulations**

The following components appear on one or more of the following state hazardous substances lists:

| Component           | CAS          | CA  | MA  | MN  | NJ  | PA  |
|---------------------|--------------|-----|-----|-----|-----|-----|
| Calcium carbonate   | 1317-65-3    | No  | Yes | Yes | Yes | Yes |
| Silica compound     | Trade Secret | No  | Yes | Yes | Yes | Yes |
| Carbon compound     | Trade Secret | Yes | Yes | Yes | Yes | Yes |
| Silica, crystalline | 14808-60-7   | No  | Yes | Yes | Yes | Yes |

# The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer

| Carbon compound     | Trade Secret  |
|---------------------|---|
| Carc:               | carcinogen, initial date 2/21/03 (airborne, unbound particles of respirable size) |
| Silica, crystalline | 14808-60-7  |
| Carc:               | carcinogen, initial date 10/1/88 (airborne particles of respirable size)          |

#### **Canadian WHMIS Ingredient Disclosure List (IDL)**

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

| Carbon compound     | Trade Secret |
|---------------------|--------------|
|                     | 1 %          |
| Silica, crystalline | 14808-60-7   |
|                     | 1 %          |

## **Component Analysis - Inventory**

Calcium carbonate (1317-65-3)

| US CA EU AU PH JP-ENCS JP-ISHL KR-KECI/KECL KR-TCCA CN N | NZ MX |
|--|-------|
|--|-------|



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|-------------------------------------|--------------------|
| Matchai Maine. Match Out-On Mastic  | 1 10ddCl #. 313021 |

| Yes | NSL | EIN | Yes | Yes | Yes | No | Yes | No | Yes | Yes | Yes |  |
|-----|-----|-----|-----|-----|-----|----|-----|----|-----|-----|-----|--|
|-----|-----|-----|-----|-----|-----|----|-----|----|-----|-----|-----|--|

# Silica compound (Trade Secret)

| US  | CA  | EU | AU  | PH  | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN  | NZ  | MX  |
|-----|-----|----|-----|-----|-----------|-----------|----------------|-----------|-----|-----|-----|
| Yes | DSL | No | Yes | Yes | Yes       | No        | Yes            | No        | Yes | Yes | Yes |

## Carbon compound (Trade Secret)

| US  | CA  | EU  | AU  | PH  | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN  | NZ  | MX  |
|-----|-----|-----|-----|-----|-----------|-----------|----------------|-----------|-----|-----|-----|
| Yes | DSL | EIN | Yes | Yes | Yes       | No        | Yes            | No        | Yes | Yes | Yes |

## Polyphenol antioxidant (Trade Secret)

| US | CA    | EU  | AU  | PH  | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN  | NZ  | MX |
|----|-------|-----|-----|-----|-----------|-----------|----------------|-----------|-----|-----|----|
| Ye | s DSI | EIN | Yes | Yes | Yes       | No        | Yes            | No        | Yes | Yes | No |

## Severely hydrotreated paraffinic oil (Trade Secret)

| US  | CA  | EU  | AU  | PH  | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN  | NZ  | MX |
|-----|-----|-----|-----|-----|-----------|-----------|----------------|-----------|-----|-----|----|
| Yes | DSL | EIN | Yes | Yes | No        | No        | Yes            | No        | Yes | Yes | No |

# Polybutene (Trade Secret)

| US  | CA  | EU | AU  | PH  | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN  | NZ  | MX  |
|-----|-----|----|-----|-----|-----------|-----------|----------------|-----------|-----|-----|-----|
| Yes | DSL | No | Yes | Yes | Yes       | No        | Yes            | No        | Yes | Yes | Yes |

## Solvent naphtha, petroleum, light aliphatic (64742-89-8)

| US | S  | CA  | EU  | AU  | PH  | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN  | NZ  | MX  |
|----|----|-----|-----|-----|-----|-----------|-----------|----------------|-----------|-----|-----|-----|
| Ye | es | DSL | EIN | Yes | Yes | No        | No        | Yes            | No        | Yes | Yes | Yes |

## Hydrous clay (Mixture)

| US  | CA  | EU | AU  | PH  | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN  | NZ  | MX  |
|-----|-----|----|-----|-----|-----------|-----------|----------------|-----------|-----|-----|-----|
| Yes | DSL | No | Yes | Yes | No        | No        | Yes            | No        | Yes | Yes | Yes |

# Silica, crystalline (14808-60-7)

| US  | CA  | EU  | AU  | PH  | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN  | NZ  | MX  |
|-----|-----|-----|-----|-----|-----------|-----------|----------------|-----------|-----|-----|-----|
| Yes | DSL | EIN | Yes | Yes | Yes       | No        | Yes            | No        | Yes | Yes | Yes |

## **Section 16 - OTHER INFORMATION**



Material Name: Water Cut-Off Mastic Product #: 319621

**HMIS Rating** 

Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

**NFPA Ratings** 

Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**Summary of Changes** 

Revision Date: January 24, 2019 Revision Note: General Update

## Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA -Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT -Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA -Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL -Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value: LOLI - List Of LIsts<sup>TM</sup> - ChemADVISOR's Regulatory Database: MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID -European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

#### **Other Information**

#### Disclaimer:

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.

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