



# SAFETY DATA SHEET

<b>SECTION 1.0</b>	<b>PRODUCT AND COMPANY IDENTIFICATION</b>
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**Product Identifier**

UNIPAR® SH 160 EP

**Other Means of Identification**

Distillates, petroleum, hydrotreated light; Hydrotreated light distillate; Hydrotreated light distillates (petroleum); DISTILLATES.

**Recommended use (identified)**

Petrochemical industry: Petroleum refining. Solvent.

**Uses Advised Against**

None known.

**Manufacturer/Importer/Supplier/Distributor Information**

UniSource Energy, LLC.  
 40 Shuman Blvd, Suite 290  
 Naperville, IL 60563

**E-mail**

orders@unisource-energy.com

**Telephone number**

Phone: 630-470-6030 Fax: 630-470-6031

**Emergency telephone number**

UniSource Energy, LLC.  
 1-800-444-5510

CHEMTREC  
 1-800-424-9300

<b>SECTION 2.0</b>	<b>HAZARD(S) IDENTIFICATION</b>
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**OSHA/HCS Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**GHS Classification**

ASPIRATION HAZARD – Category 1

**GHS Label Elements****Hazard pictograms****Signal word**

DANGER

**Hazard statements**

May be fatal if swallowed and enters airways.

**Precautionary Statements**



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## Prevention

Not applicable.

## Response

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

## Storage

Store locked up.

## Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

## Hazards not Otherwise Classified

None known.

## SECTION 3.0

## COMPOSITION/INFORMATION ON INGREDIENTS

### Substance/Mixture

Substance

### CAS Number

64742-47-8

### Other Means of Identification

Distillates, petroleum, hydrotreated light; Hydrotreated light distillate; Hydrotreated light distillates (petroleum); DISTILLATES

### CAS Number

Ingredient Name	%	CAS number
Distillates (petroleum), hydrotreated light	100	64742-47-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4.0

## FIRST AID MEASURES

### Description of Necessary First Aid Measures

#### Eye contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

#### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### Skin contact



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Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

## Ingestion

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Most Important Symptoms, Acute and Delayed

### Potential acute health effects

#### Eye contact

No known significant effects or critical hazards.

#### Inhalation

No known significant effects or critical hazards.

#### Skin contact

Defatting to the skin. May cause skin dryness and irritation.

#### Ingestion

May be fatal if swallowed and enters airways.

## Over-exposure signs/symptoms

#### Eye contact

No specific data.

#### Inhalation

No specific data.

#### Skin contact

Adverse symptoms may include the following: irritation, dryness or cracking.

#### Ingestion

Adverse symptoms may include the following: nausea or vomiting

## Indication of Immediate Medical Attention and Special Treatment Needed, if Necessary

### Notes to physician

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

### Specific treatments

No specific treatment.

### Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## SECTION 5.0

## FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Use an extinguishing agent suitable for the surrounding fire.

### Unsuitable Extinguishing Media

Do not use water jet.

### Specific Hazards Arising from the Chemical



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In a fire or if heated, a pressure increase will occur and the container may burst.

## Hazardous Thermal Decomposition Products

Decomposition products may include the following materials: carbon dioxide, carbon monoxide.

## Special Protective Actions for Firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

## Special Protective Equipment for Firefighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## SECTION 6.0

## ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

#### For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

#### For emergency personnel

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

### Environmental Precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and Materials for Containment and Cleaning Up

#### Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

#### Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## SECTION 7.0

## HANDLING AND STORAGE

### Precautions for Safe Handling Protective measures



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Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

### Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### Conditions for Safe Storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## SECTION 8.0

## EXPOSURE CONTROLS/PERSONAL PROTECTION

### Occupational Exposure Limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated light	ACGIH TLV (United States, 3/2017). Absorbed through skin. TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours.

### Appropriate Engineering Controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Environmental Exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual Protective Measures, such as Personal Protective Equipment

#### Hygiene measures

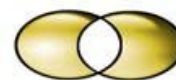
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/Face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side shields.

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the



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parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

## Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## Respiratory protection

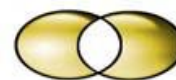
Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

<b>SECTION 9.0</b>	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>
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<b>Physical state</b>	Liquid.
<b>Color</b>	Colorless
<b>Odor</b>	Mild. Hydrocarbon.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point</b>	-49°C (-56.2°F)
<b>Boiling point</b>	231.67°C to 262.78°C (449°F to 505°F)
<b>Flash point, Closed Cup</b>	103.33°C (218°F) [Pensky-Martens.]
<b>Evaporation rate</b>	0.232 (butyl acetate = 1)
<b>Flammability (solid, gas)</b>	Not available.
<b>Lower and upper explosive (flammable) limits</b>	Lower: 0.6% Upper: 5.5%
<b>Vapor pressure</b>	0.013 kPa (0.1 mm Hg) [room temperature]
<b>Vapor density</b>	4.5 [Air = 1]
<b>Relative density</b>	0.792
<b>Solubility</b>	Insoluble in the following materials: cold water and hot water.
<b>Solubility in water</b>	1.5 g/l
<b>Partition coefficient n-octanol/water</b>	Not applicable.
<b>Auto-ignition temperature</b>	>220°C (>428°F)
<b>Decomposition temperature</b>	Not available.
<b>Kinematic Viscosity @ &gt;104°F (&gt; 40°C)</b>	0.0215 cm <sup>2</sup> /s (2.15 cSt)
<b>Flow time (ISO 2431)</b>	Not available.
<b>Pour point</b>	-40°C (-40°F)

<b>SECTION 10.0</b>	<b>STABILITY AND REACTIVITY</b>
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## Reactivity



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No specific test data related to reactivity available for this product or its ingredients.

**Chemical Stability.**

The product is stable.

**Possibility of Hazardous Reactions**

Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to Avoid**

No specific data.

**Incompatible Materials**

No specific data.

**Hazardous Decomposition Products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11.0

## TOXICOLOGICAL INFORMATION

**Information on Toxicological Effects**

**Acute toxicity**

Ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated light	LD <sub>50</sub> Dermal	Rabbit	>2000 mg/kg	
	LD <sub>50</sub> Oral	Rat	>5000 mg/kg	

**Irritation/Corrosion**

Not available.

**Sensitization**

Not available.

**Mutagenicity**

Not available.

**Carcinogenicity**

Not available.

**Reproductive Toxicity**

Not available.

**Teratogenicity**

Not available.

**Specific Target Organ Toxicity - Single Exposure**

Not available.

**Specific Target Organ Toxicity - Repeated Exposure**

Not available.

**Aspiration Hazard**

Name	Result
Distillates (petroleum), hydrotreated light	ASPIRATION HAZARD - Category 1

**Information on the likely Routes of Exposure**

Routes of entry anticipated: Oral, Dermal, Inhalation.

**Potential Acute Health Effects**

**Eye contact**

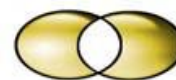
No known significant effects or critical hazards.

**Inhalation**

No known significant effects or critical hazards.

**Skin contact**

Defatting to the skin. May cause skin dryness and irritation.



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## Ingestion

May be fatal if swallowed and enters airways.

## Symptoms related to the Physical, Chemical and Toxicological Characteristics

### Eye Contact

No specific data.

### Inhalation

No specific data.

### Skin contact

Adverse symptoms may include the following: Irritation dryness cracking

### Ingestion

Adverse symptoms may include the following: nausea or vomiting

## Delayed and Immediate Effects and also Chronic Effects from Short- and Long-Term Exposure

### Short term exposure

Not available.

### Long term exposure

Not available.

### Potential chronic health effects

Not available.

### General

Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

### Carcinogenicity

No known significant effects or critical hazards.

### Mutagenicity

No known significant effects or critical hazards.

### Teratogenicity

No known significant effects or critical hazards.

### Developmental effects

No known significant effects or critical hazards.

### Fertility effects

No known significant effects or critical hazards.

## Numerical Measures of Toxicity

### Acute toxicity estimates

Not available.

<b>SECTION 12.0</b>	<b>ECOLOGICAL INFORMATION</b>
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## Toxicity

Product/ingredient name	Test	Result	Species	Exposure
Distillates (petroleum), hydrotreated light	Acute EC <sub>50</sub>	>1000 mg/l	Algae	72 hours
	Acute LC <sub>50</sub>	>1000 mg/l, Fresh water	Daphnia	48 hours

## Persistence and Degradability

Product/ingredient name	Test	Result
Distillates (petroleum), hydrotreated light	OECD 301F Ready Biodegradability – Manometric Respirometry Test	69 % - Readily - 28 days
Product/ingredient name	Biodegradability	
Distillates (petroleum), hydrotreated light	Readily	

## Bioaccumulative Potential

Not available.





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## Mobility in Soil

Not available.

## Other Adverse Effects

No known significant effects or critical hazards.

## SECTION 13.0

## DISPOSAL CONSIDERATIONS

### Disposal Instructions

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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### RCRA Classification

Not regulated.

## SECTION 14.0

## TRANSPORT INFORMATION

	DOT Classification	TDG Classification	IMDG	IATA
UN Number	Not regulated.	Not regulated.	Not regulated.	Not regulated.

### Special Precautions for User

#### Transport within user's premises

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

Not available.

## SECTION 15.0

## REGULATORY INFORMATION

### US Federal Regulations

#### TSCA 8(a) CDR Exempt/Partial exemption

All components are listed or exempted

#### Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)

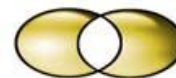
Not listed.

#### Clean Air Act Section 602 Class I Substances

Not listed.

#### Clean Air Act Section 602 Class II Substances

Not listed.



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**DEA List I Chemicals (Precursor Chemicals)**

Not listed.

**DEA List II Chemicals (Essential Chemicals)**

Not listed.

**SARA 302/304**

Composition/information on ingredients

No products were found.

**SARA 304 RQ**

Not applicable.

**SARA 311/312 Classification**

ASPIRATION HAZARD - Category 1

**SARA 311/312 Composition/information on ingredients**

Ingredient Name	%	Classification
Distillates (petroleum), hydrotreated light	≥10 - ≤25	ASPIRATION HAZARD - Category 1

**State Regulations**
**Massachusetts**

This material is not listed.

**New York**

This material is not listed.

**New Jersey**

This material is not listed.

**Pennsylvania**

This material is not listed.

**California Proposition 65**

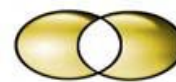
This product is not known to contain California Prop 65 substances ≥1 ppm.

**National Inventory**

<b>Australia</b>	All components are listed or exempted.
<b>Canada</b>	All components are listed or exempted.
<b>China</b>	All components are listed or exempted.
<b>Europe</b>	All components are listed or exempted.
<b>Japan ENCS</b>	All components are listed or exempted.
<b>Japan ISHL</b>	Not determined.
<b>Malaysia</b>	All components are listed or exempted.
<b>New Zealand</b>	All components are listed or exempted.
<b>Philippines</b>	All components are listed or exempted.
<b>Republic of Korea</b>	All components are listed or exempted.
<b>Taiwan</b>	All components are listed or exempted.
<b>Thailand</b>	Not determined.
<b>Turkey</b>	All components are listed or exempted.
<b>United States</b>	All components are listed or exempted.
<b>Viet Nam</b>	Not determined.

**SECTION 16.0**
**OTHER INFORMATION**
**Procedure used to derive the Classification**

Classification	Justification
Aspiration Toxicity, 1	Calculation method.



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## Abbreviations

ACGIH = American Conference of Governmental Industrial Hygienists; ADR = European Road Transport; AICS = Australia Inventory of Chemical Substances; AIHA = American Industrial Hygiene Association; ASTM = American society of Testing and Materials; ATE = Acute Toxicity Estimation; AU = Australia; Autoignition Temperature = The minimum temperature required to initiate combustion in air with no other source of ignition, BCF = Bioconcentration Factor; BEI = - Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV, BEL = Biological exposure limits; BOD = Biochemical Oxygen Demand; BTEX = Benzene, Toluene, Ethylbenzene, Xylenes; bw = body weight; bw/day = body weight/day; C = Celsius, CA = Canada, CAS = Chemical Abstracts Service; CEFIC = European Chemical Industry Council; CEILING = Ceiling Limit (15 minutes); CERCLA = The Comprehensive Environmental Response, Compensation, and Liability Act; CLP = Classification Packaging and Labelling Regulation (Regulation (EU) No. 1272/2008; COC = Cleveland Open Cup; CN = China; CPR= Controlled Products Regulations; CWA = Clean Water Act; DEA – Drug Enforcement Administration; DFG = Deutsche Forschungsgemeinschaft; DIN = Deutsches Institut für Normung; DMEL = Derived Minimal Effect Level; DNEL = Derived No Effect Level; DOT = Department of Transportation; DSL = Domestic Substances List (Canada); dw = dry weight; EC = European Commission; EC50 = Effective Concentration fifty; ECC = European Economic Community; ECETOC = European Center on Ecotoxicology and Toxicology Of Chemicals; ECHA = European Chemicals Agency; EC<sub>x</sub> = Effect Concentration associated with x% response; EINECS - European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EL50 = Effective Loading fifty; ENCS = Japan Existing and New Chemical Substances; EPA = Environmental Protection Agency; EU = European Union; EUH statement = CLP – specific Hazard statement; EWC = European Waste Code; F = Fahrenheit; Flash Point = Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable mixture with air; fw = fresh water; GHS = Globally Harmonized System of Classification and Labelling of Chemicals; GLP = Good Laboratory Practice; HAPs = Hazardous Air Pollutants; IARC = International Agency for Research on Cancer; IATA = International Air Transport Association; IBC = Intermediate Bulk Container; IC<sub>50</sub> = Inhibitory Concentration fifty; ICAO = International Civil Aviation Organization; IDL = Ingredient Disclosure List; IDLH = Immediately Dangerous to Life and Health; IL<sub>50</sub> = Inhibitory Level fifty; IMDG = International Maritime Dangerous Goods; INSHT = National Institute for Health and Safety at Work; INV = Chinese Chemicals Inventory; IOPC = International Oil Pollution Compensation; IP346 = Institute of Petroleum test method N° 346 for the determination of polycyclic aromatics DMSO-extractables; JP – Japan; , Kow = Octanol/water partition; KECI = Korea Existing Chemicals Inventory, LC<sub>50</sub> = Lethal Concentration (gases) which kills 50% of the exposed animals, LD<sub>50</sub> = :Lethal Dose (solids & liquids) which kills 50% of the exposed animals; . LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading; LL<sub>50</sub> = Lethal Loading fifty; LEL = The lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.; LogPow = logarithm of the octanol/water partition coefficient; LOLI = List of Lists™ - ChemADVISOR's Regulatory Database; LRT = Lower Respiratory Tract, MARPOL 73/78 = International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution; MAK = Maximum Concentration Value in the Workplace; MEL = Maximum Exposure Limits; mg/m<sup>3</sup> = : Concentration expressed in weight of substance per volume of air, mg/kg = Quantity of material, by weight, administered to a test subject, based on their body weight in kg, mw = marine water; NDSL = Non-Domestic Substances List (Canada); NE = Not Established; NFPA = National Fire Protection Association; NIOSH = National Institute for Occupational Safety and Health; NJTSR = New Jersey Trade Secret Registry; NOEC/NOEL = No Observed Effect Concentration / No Observed Effect Level; NTP = National Toxicology Program; NZ = New Zealand; OECD = Organization for Economic Co-operation and Development; OE-HPV = Occupational Exposure - High Production Volume; or = occasional release; OSHA = U.S. Occupational Safety and Health Administration; PAH = Polycyclic Aromatic Hydrocarbon; PBT = Persistent, Bioaccumulative and Toxic; PEL = Permissible Exposure Limit (OSHA); PH= Philippines; PICCS = Philippines Inventory of Chemicals and Chemical Substances; ppm = Concentration expressed in parts of material per million parts of air or water, PMCC = Pensky Martin Closed Cup; PNEC = Predicted No Effect Concentration; RCRA = Resource Conservation and Recovery; REACH = Registration Evaluation And Authorization Of Chemicals; RID = European Rail Transport; RRN = REACH Registration Number: RQ = Reportable Quantity; RTECS = Registry of Toxic Effects of Chemical Substances®; RTK = Right To Know; SARA = Superfund Amendments and Reauthorization Act; S\* = Skin notation; SKIN\_DES = Skin Designation; STEL = Short Term Exposure Limit (15 minutes); SCBA = Self-Contained Breathing Apparatus; SDWA = Safe Drinking Water Act; STOT = Specific Target Organ Toxicity, TDLo, = the lowest dose to cause a symptom, TSCA = Toxic Substance Control Act; TCLo = the lowest concentration to cause a symptom; TDo, LDLo, and LDo, or TC, TCo, LCLo, and LCo, the lowest dose (or concentration) to cause lethal or toxic effects, TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value (ACGIH); TRA = Targeted Risk Assessment; TSCA = Toxic Substances Control Act ; TWA = Time Weighted Average (8 hours); UEL = The highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.; UN = United Nations; URT = Upper Respiratory Track, US = United States; UVCB = Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and



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Biological Materials (UVCB Substance) on the TSCA Inventory vPvB = very Persistent and very Bioaccumulative; WHMIS = Worker Hazardous Materials Information System (Canada)

## Disclaimer

The information presented herein has been compiled from sources considered to be dependable and is accurate as of the date of preparation of this Safety Data Sheet. However, Seller does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license. All materials may present unknown hazards and should be used with caution. In addition, no responsibility can be assumed by the Seller for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the material. Seller assumes no responsibility for injury to Buyer or to third persons or any damage to any property. Buyer assumes all such risks.