



SAFETY DATA SHEET

SECTION 1.0	PRODUCT AND COMPANY IDENTIFICATION
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Product Identifier

UNIPAR® S 100 AC

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, Inc.
 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, Inc.
 1-800-444-5510

CHEMTREC
 1-800-424-9300

SECTION 2.0	HAZARD(S) IDENTIFICATION
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OSHA/HCS Status

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

GHS Classification

FLAMMABLE LIQUIDS - Category 3
 SKIN IRRITATION – Category 2
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
 ASPIRATION HAZARD – Category 1
 AQUATIC HAZARD (LONG-TERM) – Category 2

GHS Label Elements**Hazard pictograms**



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Signal word

DANGER

Hazard statements

Flammable liquid and vapor.
 Causes skin irritation.
 May be fatal if swallowed and enters airways.
 May cause drowsiness or dizziness.
 Toxic to aquatic life with long lasting effects.

Precautionary Statements
Prevention

Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosionproof electrical, ventilating, lighting and all material-handling equipment. Use only nonsparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash hands thoroughly after handling.

Response

Collect spillage. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention.

Storage

Store locked up. Store in a well-ventilated place. Keep cool.

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.



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SECTION 4.0	FIRST AID MEASURES
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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 if irritation occurs.

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

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. 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

Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact

Causes skin irritation

Ingestion

Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

Eye contact

Adverse symptoms may include the following: pain or irritation, watering, redness.

Inhalation

Adverse symptoms may include the following: nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness.

Skin contact

Adverse symptoms may include the following: irritation, redness.

Ingestion

Adverse symptoms may include the following: nausea or vomiting.

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

Notes to physician



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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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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
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Suitable Extinguishing Media

Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable Extinguishing Media

Do not use water jet.

Specific Hazards Arising from the Chemical

Flammable liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous Thermal Decomposition Products

No specific data.

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
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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. Shut off all ignition sources. No flares, smoking or flames in hazard area. 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".



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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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

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

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

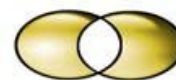
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional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

Conditions for Safe Storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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



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Occupational Exposure Limits

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

Appropriate Engineering Controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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: Chemical splash goggles.

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 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. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

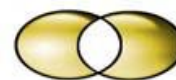
Other skin protection

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.

SECTION 9.0
PHYSICAL AND CHEMICAL PROPERTIES



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Physical state	Liquid.
Color	Colorless
Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Melting point	-49°C (-56.2°F)
Boiling point	148.89°C to 212.78°C (300°F to 415°F)
Flash point, Tagliabue Closed Cup	40°C (104°F)
Evaporation rate	0.12 (butyl acetate = 1)
Flammability (solid, gas)	Not available.
Lower and upper explosive (flammable) limits	Lower: 0.6% Upper: 5.5%
Vapor pressure	0.21 kPa (01.6 mm Hg) [room temperature]
Vapor density	4.5 [Air = 1]
Relative density	0.7669
Solubility	Insoluble in the following materials: cold water and hot water.
Solubility in water	1.5 g/l
Partition coefficient n-octanol/water	Not applicable.
Auto-ignition temperature	>220°C (>428°F)
Decomposition temperature	Not available.
Kinematic Viscosity @ >104°F (> 40°C)	<0.1 cm ² /s (<10 cSt)
Flow time (ISO 2431)	Not available.

SECTION 10.0

STABILITY AND REACTIVITY

Reactivity

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

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible Materials

Reactive or incompatible with the following materials: oxidizing materials.

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



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Acute toxicity

Not available

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

Name	Category	Route of Exposure	Target Organs
Distillates (petroleum), hydrotreated light	Category 3	Not applicable	Narcotic effects

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

Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact

Causes skin irritation.

Ingestion

Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the Physical, Chemical and Toxicological Characteristics
Eye contact

Adverse symptoms may include the following: pain or irritation, watering, redness.

Inhalation

Adverse symptoms may include the following: nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness.

Skin contact

Adverse symptoms may include the following: irritation, redness.

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



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No known significant effects or critical hazards.

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.

SECTION 12.0	ECOLOGICAL INFORMATION
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Toxicity

Product/ingredient name	Test	Result	Species	Exposure
Distillates (petroleum), hydrotreated light	Acute LC ₅₀	2200 µg/l Fresh Water	Fish - Lepomis macrochirus	4 days

Persistence and Degradability

Not available.

Bioaccumulative Potential

Not available.

Mobility in Soil

Not available.

Other Adverse Effects

No known significant effects or critical hazards.

SECTION 13.0	DISPOSAL CONSIDERATIONS
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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.



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SECTION 14.0	TRANSPORT INFORMATION
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	DOT Classification	TDG Classification	IMDG	IATA
UN Number	UN1268	UN1268	UN1268	UN1268
UN Proper Shipping Name	Petroleum distillates, n.o.s.	PETROLEUM DISTILLATES, N.O.S.	PETROLEUM DISTILLATES, N.O.S.	Petroleum distillates, n.o.s.
Transportation Hazard Class(es)	3 	3 	3 	3 
Packaging Group	III	III	III	III
Environmental Hazards	No	Yes	Yes	Yes. The Environmentally hazardous substance mark is not required.

Additional Information

DOT Classification

This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials.

Limited quantity Yes.

Packaging instruction Exceptions: 150. Non-bulk: 203. Bulk: 242.

Quantity limitation Passenger aircraft/rail: 60 L. Cargo aircraft: 220 L.

Special provisions 144, B1, IB3, T4, TP1, TP29

TDG Classification

Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail.

Explosive Limit and Limited Quantity Index 5

Passenger Carrying Road or Rail Index 60

IMDG

The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Emergency schedules F-E, S-E

Special provisions 223, 363, 955

IATA

The environmentally hazardous substance mark may appear if required by other transportation regulations.

Quantity limitation Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355.

Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities - Passenger

Aircraft: 10 L. Packaging instructions: Y344.

Special provisions A3

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.



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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.

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 Composition/information on ingredients

No products were found.

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 any chemicals currently listed as carcinogens or reproductive toxins.

National Inventory

Australia	This material is listed or exempt.
Canada	This material is listed or exempt.
China	This material is listed or exempt.
Europe	This material is listed or exempt.
Japan ENCS	Not determined.
Japan ISHL	Not determined.
Malaysia	This material is listed or exempt.
New Zealand	This material is listed or exempt.
Philippines	This material is listed or exempt.
Republic of Korea	This material is listed or exempt.



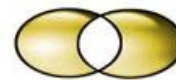
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Taiwan	This material is listed or exempt.
Thailand	Not determined.
Turkey	This material is listed or exempt.
United States	This material is listed or exempt.
Viet Nam	Not determined.

SECTION 16.0	OTHER INFORMATION
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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_x = 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; IC₅₀ = Inhibitory Concentration fifty; ICAO = International Civil Aviation Organization; IDL = Ingredient Disclosure List; IDLH = Immediately Dangerous to Life and Health; IL₅₀ = 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, LC₅₀ = Lethal Concentration (gases) which kills 50% of the exposed animals, LD₅₀ = :Lethal Dose (solids & liquids) which kills 50% of the exposed animals; . LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading; LL₅₀ = 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/m³ = : 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



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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 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.