



SAFETY DATA SHEET

SECTION 1.0	PRODUCT AND COMPANY IDENTIFICATION
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Product Identifier

UNIPAR® D 100 ST

Substance/mixture

Substance

Recommended use (identified)

Industrial Solvent, Functional Fluid, Process Fluid

Uses advised against

Do not use for any purpose other than the one for which it is intended.

Manufacturer/Importer/Supplier/Distributor InformationUNISOURCE-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 numberUNISOURCE-ENERGY, LLC
1-800-444-5510CHEMTREC
1-800-424-9300

SECTION 2.0	HAZARD(S) IDENTIFICATION
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OSHA/HCS status

Aspiration toxicity – Category 1

GHS label elements



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Signal word

DANGER

Hazard statement

May be fatal if swallowed and enters airways

Precautionary statement
Ingestion

If SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Do NOT induce vomiting

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown Acute Toxicity

No information available

Hazard(s) not otherwise classified (HNOC)

None known

Other information

Vapors may form explosive mixtures with air.

The material can accumulate static charge and therefore cause electrical ignition.

Prolonged or repeated contact may cause skin irritation.

SECTION 3.0	COMPOSITION/INFORMATION ON INGREDIENTS
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Chemical name

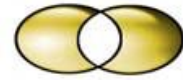
A complex and variable combination of paraffinic and cyclic hydrocarbons having a carbon number range of C₁₃ to C₁₆ and a boiling range of approximately 220°C to 275°C

The aromatic content is < 0.03%

CAS number/other identifiers

Ingredient Name	%	CAS number
Hydrocarbons, C ₁₃ to C ₁₆ , n-alkanes, Isoalkanes, cyclics, < 0.03% aromatics*	100	*

*Related CAS: 64742-47-8



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SECTION 4.0	FIRST AID MEASURES
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Description of necessary first aid measures

General advice

IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE

Eye contact

Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.

Inhalation

In case of intense concentrations of vapors, fumes or spray, transport the person away from the contaminated zone, keep warm and allow to rest.

Skin contact

Remove contaminated clothing and shoes. Wash off with soap and water.

Ingestion

Do not ingest. If swallowed, do not induce vomiting - seek medical advice.

Risk of product entering the lungs on vomiting after ingestion. In this case, the casualty should be sent immediately to hospital.

Protection of First Aiders

Use personnel protective equipment

Most important symptoms/effects, acute and delayed

Skin contact

Prolonged or repeated contact may dry skin and cause irritation.

Eye contact

Burning feeling and temporary redness

Inhalation

The inhalation of vapors or aerosols may be irritating for the respiratory tract and for mucous membranes. Vapors inhaled in strong concentration have a narcotic effect on the central nervous system.

Ingestion

If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious pulmonary lesions (medical survey during 48 hours)

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system depression.

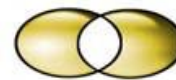
Symptoms

Redness

Indication of immediate medical attention and special treatment , if necessary

Note to physician

Treat symptomatically



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SECTION 5.0	FIRE-FIGHTING MEASURES
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Suitable extinguishing media

Foam, Dry powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Special Hazard

Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

Explosion Hazard

Sensitivity to Mechanical Impact – None.

Sensitivity to Static Discharge – None.

Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand. MISHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel.

SECTION 6.0	ACCIDENTAL RELEASE MEASURES
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Personal precautions, protective equipment and emergency procedures

General Information

Use personal protective equipment

Evacuate non-essential personnel

Ensure adequate ventilation, especially in confined areas

ELIMINATE all ignition sources (no smoking, fires, sparks or flames in immediate area)

Do not touch or walk through spilled material

Other information

Remove all sources of ignition

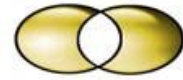
Environmental precautions

Prevent further leakage or spillage if safe to do so. Dike to collect liquid spills. The product should not be allowed to enter drains, water courses or the soil. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed container for disposal.

Following product recovery, flush area with water.



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SECTION 7.0	HANDLING AND STORAGE
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Precautions for safe handling

Advice on safe handling

For personal protection see Section 8. Avoid contact with skin, eyes and clothing. Use only in well ventilated areas. Do not breathe vapors or spray mist.

Technical measures

Ensure adequate ventilation.

Do not spray at high pressure (> 3 bar)

Prevention of fire and explosion

Handle away from any source of ignition (open flame and sparks) and heat (hot manifolds or casings). Do not smoke.

Take precautionary measures against static discharges.

Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke.

Regular cleaning of equipment, work area and clothing is recommended. Do not dry hands with rags that have been contaminated with product. Do not use abrasives, solvents or fuels.

Wash hands before breaks and at the end of workday.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts.

Storage installations should be designed with adequate bunds so as to prevent ground or water pollution in case of leaks or spills.

Keep in a bunded area. Keep in a dry, cool and well-ventilated place.

Keep away from open flames, hot surfaces and sources of ignition. Ground/bond containers, tanks and transfer/receiving equipment. Store at room temperature.

Keep containers tightly closed and properly labelled.

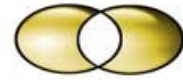
Use only hydrocarbon-resistant containers, seals, pipes, etc.

Packaging material

Keep only in the original container or in a suitable container for this kind of product, steel, stainless steel

Materials to avoid

Strong acids, Oxidizing agents



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SECTION 8.0	EXPOSURE CONTROLS/PERSONAL PROTECTION
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Control Parameters

Exposure Limits (Mineral oil mist)

OSHA (PEL)	TWA	5 mg/m ³
NIOSH (REL)	TWA	5 mg/m ³
	STEL	10 mg/m ³
ACGIH (TLV)	TWA	5 mg/m ³ (highly refined)

Exposure controls

Engineering Measures

When working in confined areas (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear recommended equipment.

Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

General information

Protective engineering solutions should be implemented and in use before personal equipment is considered. These recommendations apply to the product as supplied. If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.

Eye/Face protection

If splashes are likely to occur: Safety glasses with side shields

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots.

Hand protection

Protective gloves

Respiratory protection

If exposure limits are exceeded or irritation is experienced. NIOSH/MAHA approved respiratory protection should be worn. Positive pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current regulations.

Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke.

Regular cleaning of equipment, work area and clothing is recommended. Do not dry hands with rags that have been contaminated with product. Do not use abrasives, solvents or fuels.

Wash hands before breaks and at the end of workday.



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SECTION 9.0	PHYSICAL AND CHEMICAL PROPERTIES
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Physical state @ 20°C	Liquid
Color	Colorless
Odor	Slight
Odor threshold	No information available
pH	Not applicable
Melting point/freezing point	No information available
Initial boiling point and boiling range	234 - 263°C (453 - 505°F) ISO 3405
Flash point	≥102°C (≥216°F) ASTM D93
Evaporation rate EtEt=1	>1000
Upper explosive (flammable) limits	6 %
Lower explosive (flammable) limits	1 %
Vapor pressure	0.04 hPa @ 20°C
Vapor density	>3
Relative density	No information available
Density	817 kg/m ³ @ 15°C ISO 12185
Water Solubility	Substance is a UVCB. Standard tests for this endpoint are not appropriate.
Solubility in other solvents	Soluble in many common organic solvents.
LogP_{ow}	Not applicable
Auto-ignition temperature	>230°C (>446°F) ASTM E 659
Decomposition temperature	No information available
Viscosity, kinematic	2.3 mm ² /s @ 40°C ASTM D 445
Explosive properties	Not considered explosive based on chemical structure and oxygen balance considerations.
Oxidizing properties	This product is not considered oxidizing based on chemical structure considerations.
Possibility of hazardous reactions	None under normal processing.
Freezing point	No information available

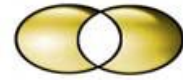
SECTION 10.0	STABILITY AND REACTIVITY
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Reactivity

None under normal processing.

Chemical stability

Stable under recommended storage conditions.



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Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks. Take precautionary measures against static discharges.

Incompatible materials

Strong acids. Oxidizing agents

Hazardous decomposition products

Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

SECTION 11.0	TOXICOLOGICAL INFORMATION
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Acute toxicity

Product Information on toxicological effects

Skin contact

Prolonged or repeated contact may dry skin and cause irritation.

Eye contact

Burning feeling and temporary redness.

Inhalation

The inhalation of vapors or aerosols may be irritating for the respiratory tract and for mucous membranes. Vapors inhaled in strong concentration have a narcotic effect on the central nervous system. Nausea.

Ingestion

If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious pulmonary lesions (medical survey during 48 hours). Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system depression.

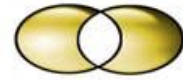
Numerical measures of toxicity – Product Information

Product information

ATEmix (oral)	5001 mg/kg
ATEmix (dermal)	5001 mg/kg mg/l

Component Information

Hydrocarbons, C ₁₃ to C ₁₆ , n-alkanes, Isoalkanes, cyclics, < 0.03% aromatics			
Procedure	Species	Results	Method
LC ₅₀	Rat	>5000 mg/kg bw	OECD 401
LD ₅₀ (24 hr.)	Rabbit	>3160 mg.kg bw	OECD 402
LC ₅₀ (4 hr.)	Rat	>5266 mg/m ³ (aerosol)	OECD 403



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Component Information on toxicological effects

Symptoms

Redness

Delayed and immediate effects as well as chronic effects from short and long term exposure

Skin corrosion/irritation

Not classified

Serious eye damage/eye irritation

Not classified

Sensitization

Not classified as a sensitizer.

Carcinogenicity

This product is not classified carcinogenic.

Mutagenicity

This product is not classified as mutagenic.

Reproductive toxicity

The current toxicological knowledge allows to not classify the product as a toxic to reproduction.

Specific Target Organ Toxicity (STOT) - single exposure

Not classified.

Specific Target Organ Toxicity (STOT) – repeated exposure

Not classified.

Aspiration hazard

May be fatal if swallowed and enters airways

SECTION 12.0

ECOLOGICAL INFORMATION

Ecotoxicity

Acute aquatic toxicity – Product Information

Not applicable

Acute aquatic toxicity – Component information

Hydrocarbons, C ₁₃ to C ₁₆ , n-alkanes, Isoalkanes, cyclics, < 0.03% aromatics			
Measurement	Species	Results	Method
ErL ₅₀ (72 hr.) Algae	Skeletonema costatum	>10,000 mg/l	IOS 10253
LL ₅₀ (96 hr.) Fish	Scophthalmus maximus	>1028 mg/l	OECD 203
LL ₅₀ (48 hr.)	Acartia tonsa	>3193 mg/l	ISO 14669



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Chronic aquatic toxicity – Product information

Not applicable.

Chronic aquatic toxicity – Component information

Hydrocarbons, C ₁₃ to C ₁₆ , n-alkanes, Isoalkanes, cyclics, < 0.03% aromatics			
Measurement	Species	Results	Method
NOELR (28d) Fish	Oncorhynchus mykiss	>1000 mg/l	QSAR Petrotox
NOELR (21d) Daphnia	Daphnia magna	>1000 mg/l	QSAR Petrotox

Effects on terrestrial organisms

No information available.

Persistence and degradability

General Information

Readily biodegradable (74% after 28 days) OECD 306.

Bioaccumulative potential

Product information

Measured experimental data on hydrocarbon UVCB substances are not meaningful, since each of the constituents is likely to behave differently.

LogP_{ow}

Not applicable.

Component information

Not applicable.

Mobility in soil

Substance is a UVCB. Standard tests for this endpoint are not appropriate.

General Information

No further information

SECTION 13.0

DISPOSAL CONSIDERATIONS

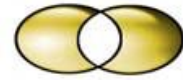
Waste treatment

Waste disposal methods

Dispose of in accordance with local regulations

Contaminated packaging

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



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SECTION 14.0	TRANSPORT INFORMATION
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DOT

Not regulated

ICAO/IATA

Not regulated

IMDG/IMO

Not regulated

TDG

Not regulated

MEX

Not regulated

ADR (Agreement on Dangerous Goods by Road (Europe))

Not regulated

RID (Regulations Concerning The International Transport of Dangerous Goods (Europe))

Not regulated

ADN (European Agreement Concerning the International Carriage of Dangerous Goods By Inland Waterways)

Not regulated

SECTION 15.0	REGULATORY INFORMATION
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Related CAS Number

64742-47-8/64742-46-7

US Federal regulations**SARA 313**

This product does not contain any chemicals which are subject to the reporting requirements of the Act and 40 CFR Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).



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Clean Air Act Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

TSCA

Listed

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right to Know Laws

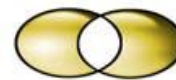
No information available.

International inventories

Europe	EINECS/ELINCS/NLP	Listed or exempt
Canada	DSL/NDSL	Listed or exempt
Australia	AICS	Listed or exempt
Korea	KECL	Listed or exempt
China	IECSC	Listed or exempt
Japan	ENCS	Listed or exempt
Philippines	PICCS	Listed or exempt
New Zealand	NZIoC	Listed or exempt

SECTION 16.0	OTHER INFORMATION
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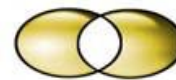
<p>HMIS CODE FLAMMABILITY</p> <p>HEALTH: 1 FLAMMABILITY: 1 REACTIVITY: 0 OTHER: X</p>	<p>NFPA RATING FLAMMABILITY</p> <p>HEALTH: 1 FLAMMABILITY: 1 REACTIVITY: 0 OTHER: -</p>
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Abbreviations

ACGIH = American Conference of Governmental Industrial Hygienists; ADR = European Road Transport; AICS = Australia Inventory of Chemical Substances; 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; 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 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



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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 = Unknown, of Variable Composition, or of Biological Origin; 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.