



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

SECTION 1. IDENTIFICATION

Product name : VAL ULTRA LOW VISCOSITY ATF

Product code : 888460

Manufacturer or supplier's details

Company name of supplier : Valvoline Global Operations

Address : 100 Valvoline Way
Lexington, KY 40509
United States of America (USA)

Telephone : 1-800-TEAMVAL (1-800-832-6825)

E-mail address : SDS@valvolineglobal.com

Emergency telephone number : +1-800-VALVOLINE (+1-800-825-8654)

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Aspiration hazard : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H304 May be fatal if swallowed and enters airways.

Precautionary statements : **Response:**
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331 Do NOT induce vomiting.
Storage:
P405 Store locked up.
Disposal:



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

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

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	$\geq 70 - < 80$
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	64742-54-7	$\geq 10 - < 15$
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	$\geq 1.5 - < 5$
DODECYL HYDROXYPROPYL SULFIDE	67124-09-8	$\geq 0.1 - < 0.5$

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : If on skin, rinse well with water.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
- Most important symptoms : No symptoms known or expected.



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

and effects, both acute and delayed

Notes to physician

May be fatal if swallowed and enters airways.

: No hazards which require special first aid measures.
Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : carbon dioxide and carbon monoxide

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Inhalable particulate matter)	5 mg/m3	ACGIH
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	64742-54-7	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Inhalable particulate matter)	5 mg/m3	ACGIH
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Inhalable particulate matter)	5 mg/m3	ACGIH



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Boiling point/boiling range : No data available

Flash point : 394 - 480 °F / 201 - 249 °C
Method: Cleveland open cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Self-ignition : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

Relative density	:	No data available
Density	:	0.865 g/cm ³
Solubility(ies)		
Water solubility	:	No data available
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	19.4 mm ² /s (104 °F / 40 °C)
Oxidizing properties	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.
Conditions to avoid	:	excessive heat
Incompatible materials	:	alkalis Strong acids Strong oxidizing agents
Hazardous decomposition products	:	No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Components:

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

Acute oral toxicity	:	LD50 (Rat): > 15 g/kg
Acute dermal toxicity	:	LD50 (Rabbit): > 5 g/kg

DODECYL HYDROXYPROPYL SULFIDE:



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
GLP: yes

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks : May cause skin irritation and/or dermatitis.

Components:

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

Assessment : Slight, transient irritation
Result : Slight, transient irritation

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Assessment : Slight, transient irritation
Result : Slight, transient irritation

DODECYL HYDROXYPROPYL SULFIDE:

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks : Vapours may cause irritation to the eyes, respiratory system and the skin.

Components:

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

Result : No eye irritation
Assessment : No eye irritation

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result : Slight, transient irritation
Assessment : Slight, transient irritation



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

DODECYL HYDROXYPROPYL SULFIDE:

Species : Rabbit
Result : No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Product:

Remarks : Causes sensitisation.

Components:

DODECYL HYDROXYPROPYL SULFIDE:

Test Type : Local lymph node assay
Species : Guinea pig
Assessment : May cause sensitisation by skin contact.
Method : OECD Test Guideline 429

Germ cell mutagenicity

Not classified based on available information.

Components:

DODECYL HYDROXYPROPYL SULFIDE:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Result: negative

Carcinogenicity

Not classified based on available information.

Components:

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Carcinogenicity - : Classified based on DMSO extract content < 3% (Regulation
Assessment (EC) 1272/2008, Annex VI, Part 3, Note L)

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

Carcinogenicity - : Classified based on DMSO extract content < 3% (Regulation
Assessment (EC) 1272/2008, Annex VI, Part 3, Note L)



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Carcinogenicity - : Classified based on DMSO extract content < 3% (Regulation
Assessment (EC) 1272/2008, Annex VI, Part 3, Note L)

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

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

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

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

May be fatal if swallowed and enters airways.

Components:

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

May be fatal if swallowed and enters airways.

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks : Solvents may degrease the skin.



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : Harmful to aquatic life.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Components:

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Ecotoxicology Assessment

Acute aquatic toxicity : Not classified based on available information.

Chronic aquatic toxicity : Not classified based on available information.

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

Toxicity to fish : LL50 (Fish): > 100 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EL50 (Aquatic invertebrates): > 10,000 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EL50 (Algae, algal mat (Algae)): > 100 mg/l
Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOEC (Fish): 10 mg/l

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Aquatic invertebrates): 10 mg/l

Ecotoxicology Assessment

Acute aquatic toxicity : Not classified based on available information.

Chronic aquatic toxicity : Not classified based on available information.

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Ecotoxicology Assessment

Acute aquatic toxicity : Not classified based on available information.

Chronic aquatic toxicity : Not classified based on available information.



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

DODECYL HYDROXYPROPYL SULFIDE:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.75 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 203
GLP: yes
- Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 0.58 mg/l
Exposure time: 48 h
Test Type: static test
Test substance: WAF
- Toxicity to algae/aquatic plants : EL50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Test substance: WAF
- M-Factor (Acute aquatic toxicity) : 1
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEL (Daphnia magna (Water flea)): 0.32 mg/l
Exposure time: 21 d
Test Type: semi-static test
Method: OECD Test Guideline 211
GLP: yes
- M-Factor (Chronic aquatic toxicity) : 1

Ecotoxicology Assessment

- Acute aquatic toxicity : Acute aquatic toxicity Category 1; Very toxic to aquatic life.
- Chronic aquatic toxicity : Chronic aquatic toxicity Category 1; Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

DODECYL HYDROXYPROPYL SULFIDE:

- Biodegradability : Result: Not readily biodegradable.
Biodegradation: 5 %
Exposure time: 28 d
Method: OECD Test Guideline 301F



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

Bioaccumulative potential

Components:

DODECYL HYDROXYPROPYL SULFIDE:

Partition coefficient: n-octanol/water : log Pow: 4.7 - 6.5

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

Not regulated as a dangerous good

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

Not applicable for product as supplied.

National Regulations

49 CFR

Not regulated as a dangerous good

Special precautions for user

Not applicable

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
XYLENE	1330-20-7	100	100 (F003)
ETHYL BENZENE	100-41-4	100	100 (F003)
BENZENE	71-43-2	10	10 (D018)
LEAD	7439-92-1	10	10 (D008)
CADMIUM	7440-43-9	10	10 (D006)

SARA 304 Extremely Hazardous Substances Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Aspiration hazard

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

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

XYLENE	1330-20-7	>= 0 - < 0.1 %
ETHYL BENZENE	100-41-4	>= 0 - < 0.1 %
BENZENE	71-43-2	>= 0 - < 0.1 %
NAPHTHALENE	91-20-3	>= 0 - < 0.1 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

XYLENE	1330-20-7	>= 0 - < 0.1 %
ETHYL BENZENE	100-41-4	>= 0 - < 0.1 %
BENZENE	71-43-2	>= 0 - < 0.1 %
NAPHTHALENE	91-20-3	>= 0 - < 0.1 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations

Massachusetts Right To Know

HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	64742-54-7
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8
SULFUR DIOXIDE	7446-09-5
TRIMETHYL PHOSPHATE	512-56-1

Pennsylvania Right To Know

HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	64742-54-7
PROPRIETARY OF LUBRIZOL 9682	Not Assigned
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8
DIPHENYLAMINE	122-39-4

Maine Chemicals of High Concern

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	64742-54-7
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	36878-20-3
DIPHENYLAMINE	122-39-4
ETHYL BENZENE	100-41-4
BENZENE	71-43-2
LEAD	7439-92-1
CADMIUM	7440-43-9
NAPHTHALENE	91-20-3

Vermont Chemicals of High Concern

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	64742-54-7
--	------------



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	36878-20-3
DIPHENYLAMINE	122-39-4
ETHYL BENZENE	100-41-4
BENZENE	71-43-2
LEAD	7439-92-1
CADMIUM	7440-43-9
NAPHTHALENE	91-20-3

Washington Chemicals of High Concern

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	64742-54-7
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	36878-20-3
DIPHENYLAMINE	122-39-4
ETHYL BENZENE	100-41-4
BENZENE	71-43-2
LEAD	7439-92-1
CADMIUM	7440-43-9
NAPHTHALENE	91-20-3

California List of Hazardous Substances

HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8

California Permissible Exposure Limits for Chemical Contaminants

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	64742-54-7
--	------------

The components of this product are reported in the following inventories:

TCSI	: On the inventory, or in compliance with the inventory
TSCA	: All substances listed as active on the TSCA inventory
AIIC	: Not in compliance with the inventory
DSL	: All components of this product are on the Canadian DSL
ENCS	: Not in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
NZIoC	: Not in compliance with the inventory



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

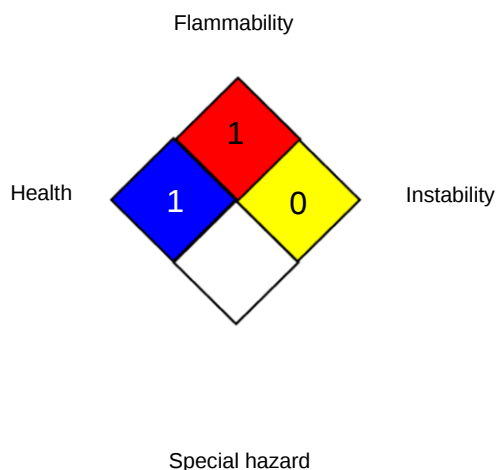
Inventories

AIIC (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TECI (Thailand), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:

HEALTH	/	3
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
OSHA Z-1 / TWA	:	8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL -



SAFETY DATA SHEET

Version: 3.0

Revision Date: 09/29/2023

Print Date:
08/21/2024

Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 09/29/2023

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / EN

Internal information : 000000275196