

SAFETY DATA SHEET

according to the OSHA
Hazard Communication Standard

Version 8.13
Revision Date 07/17/2026
Print Date 07/18/2026

SECTION 1. IDENTIFICATION

1.1 Product identifiers

Product name : Di(1-adamantyl)chlorophosphine

Product Number : 737267
Brand : Aldrich
CAS-No. : 157282-19-4

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Restrictions on use : After June 16, 2025, this chemical substance (as defined in TSCA section 3(2)) may not be distributed in commerce or processed in greater than trace quantities for the following purposes: Incorporation into formulation, mixture or reaction products in petrochemical-derived manufacturing except in the manufacture of vinyl chloride; Industrial and commercial use as an industrial processing aid in the manufacture of petrochemicals-derived products except in the manufacture of vinyl chloride; Industrial and commercial use in the manufacture of other basic chemicals (including manufacturing of chlorinated compounds used in solvents, adhesives, asphalt, and paints and coatings), except for use in the elimination of nitrogen trichloride in the production of chlorine and caustic soda and the recovery of chlorine in tail gas from the production of chlorine; Industrial and commercial use in metal recovery; Industrial and commercial use as an additive; and beginning December 18, 2025, industrial and commercial specialty uses by the U.S. Department of Defense. The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST

ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone number

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-
527-3887 CHEMTREC (International) 24
Hours/day; 7 Days/week

SECTION 2. HAZARDS IDENTIFICATION

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

Hazards for the product as supplied

Chemicals which, in contact with water, emit flammable gases : Category 3

Skin corrosion : Category 1B

Serious eye damage : Category 1

Skin sensitisation : Category 1

Carcinogenicity : Category 2

Specific target organ toxicity - repeated exposure : Category 1 (Liver, Kidney)

Hazardous to the ozone layer : Category 1

Other hazards

Reacts violently with water.

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H261 In contact with water releases flammable gases.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H372 Causes damage to organs (Liver, Kidney) through prolonged or repeated exposure.

H420 Harms public health and the environment by destroying ozone in the upper atmosphere.

Precautionary statements :

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P231 + P232 Handle under inert gas. Protect from moisture.
P260 Do not breathe dust.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P402 + P404 Store in a dry place. Store in a closed container.
P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.
P502 Refer to manufacturer/ supplier for information on recovery/ recycling.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Substance / Mixture : Substance
CAS-No. : 157282-19-4

Components

Chemical name	CAS No./Unique ID	Concentration (% w/w)	Trade secret
Di-1-adamantylchlorophosphine	157282-19-4*	$\geq 80 - \leq 100$	TSC
Carbon tetrachloride	56-23-5*	$\geq 1 - \leq 5$	TSC

* Indicates that the identifier is a CAS No.

TSC- the actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice : First aiders need to protect themselves.
Show this safety data sheet to the doctor in attendance.

If inhaled : After inhalation: fresh air. Call in physician.

In case of skin contact : In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
Call a physician immediately.

In case of eye contact : After eye contact: rinse out with plenty of water.
Immediately call in ophthalmologist.
Remove contact lenses.

If swallowed : After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation).
Call a physician immediately.
Do not attempt to neutralise.

Most important symptoms and effects, both acute and delayed : The most important known symptoms and effects are described in the labelling (see section 2 GHS label elements) and/or in section 11

Protection of first-aiders : For personal protection see section 8.

Notes to physician : No data available

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Carbon dioxide (CO₂)
Dry powder

Unsuitable extinguishing media : Water
Foam

Specific hazards during fire fighting : Combustible.

May not get in touch with: Water

Development of hazardous combustion gases or vapours possible in the event of fire.

Hazardous combustion products : Carbon oxides

Oxides of phosphorus

Hydrogen chloride gas

Specific extinguishing methods : No data available

Further information : Suppress (knock down) gases/vapours/mists with a water spray jet.
Prevent fire extinguishing water from contaminating surface water or the ground water system.

Special protective equipment for fire-fighters : Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Advice for non-emergency personnel:
Avoid generation and inhalation of dusts in all circumstances.
Avoid substance contact.
Ensure adequate ventilation.
Evacuate the danger area, observe emergency procedures, consult an expert.
Advice for emergency responders:
Wear appropriate personal protective equipment, as

indicated in Section 8.

- Environmental precautions : Do not let product enter drains.
Risk of explosion.
- Methods and materials for containment and cleaning up : Cover drains. Collect, bind, and pump off spills.
Observe possible material restrictions (see sections 7 and 10).
Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7. HANDLING AND STORAGE

For precautions see section 2 GHS label elements

- Advice on safe handling : Work under hood. Do not inhale substance/mixture.
Keep workplace dry. Do not allow product to come into contact with water.
- Further information on storage conditions : Tightly closed.
Keep away from heat and sources of ignition.
Keep locked up or in an area accessible only to qualified or authorised persons.
- Materials to avoid : Never allow product to get in contact with water during storage.
- Storage class : 4.3, Hazardous materials, which set free flammable gases upon contact with water
- Recommended storage temperature : Recommended storage temperature see product label.
- Further information on storage stability : Air sensitive.
Handle and store under inert gas.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Carbon tetrachloride	56-23-5	TWA	5 ppm	ACGIH
		STEL	10 ppm	ACGIH
		ST	2 ppm 12.6 mg/m3	NIOSH REL

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		TWA	10 ppm	OSHA Z-2
		CEIL	25 ppm	OSHA Z-2
		Peak	200 ppm (5 mins. in any 4 hrs.)	OSHA Z-2
		ECEL-TWA (Inhalation exposure)	0.03 ppm 0.2 mg/m3	TSCA ECEL

Engineering measures : No data available

Personal protective equipment

Respiratory protection : required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: : Filter type P3

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Hand protection

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0.11 mm
Protective index : Full contact
Manufacturer : KCL 741 Dermatrill® L

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0.11 mm
Protective index : Splash contact
Manufacturer : KCL 741 Dermatrill® L

Remarks : Handle with impervious gloves.
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating

from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

- Eye protection : Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Tightly fitting safety goggles
- Skin and body protection : protective clothing
- Hygiene measures : Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : solid
- Colour : No data available
- Odour : No data available
- Odour Threshold : No data available
pH : No data available
- Melting point/ range : 334 - 343 °F / 168 - 173 °C
- Boiling point/boiling range : 455 - 464 °F / 235 - 240 °C (1013 hPa)
- Flash point : No data available
- Evaporation rate : No data available
- Flammability (solid, gas) : No data available
- Flammability (liquids) : No data available
- Burning rate : 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
Relative density	: No data available
Density	: No data available
Water solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Flow time	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Molecular weight	: 336.88 g/mol
Particle characteristics	
Particle size	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
Chemical stability	: sensitive to moisture
Possibility of hazardous reactions	: No data available
Conditions to avoid	: Moisture.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: For Hazardous combustion products in the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Acute toxicity estimate Oral - 2,860 mg/kg

(Calculation method)

Oral: No data available

Acute toxicity estimate Inhalation - 4 h - 85.71 mg/l - vapour (Calculation method)

Inhalation: No data available

Acute toxicity estimate Dermal - > 5,000 mg/kg

(Calculation method)

Dermal: No data available

No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Carbon tetrachloride)

NTP: RAHC - Reasonably anticipated to be a human carcinogen (Carbon tetrachloride)

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

Reproductive toxicity

No data available

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

Cough, Shortness of breath, Headache, Nausea, Vomiting

Stomach - Irregularities - Based on Human Evidence

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Di-1-adamantylchlorophosphine:

Toxicity to fish : Remarks: No data available

Carbon tetrachloride:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 24.3 mg/l
Exposure time: 96 h
Test Type: mortality

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 35 mg/l
Exposure time: 48 h
Test Type: Immobilization
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Algae): 20 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOEC (Danio rerio (zebra fish)): 2.5 mg/l
Exposure time: 14 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 3.1 mg/l
Exposure time: 21 d

Persistence and degradability

Components:

Di-1-adamantylchlorophosphine:

Biodegradability : Remarks: No data available

Carbon tetrachloride:

Biodegradability : Remarks: No data available

Bioaccumulative potential

Components:

Di-1-adamantylchlorophosphine:

Bioaccumulation : Remarks: No data available

Carbon tetrachloride:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill)

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Bioconcentration factor (BCF): 30
Exposure time: 21 d
Concentration: 52.3 µg/l

Partition coefficient: n-octanol/water : log Pow: 2.83 (77 °F / 25 °C)
pH: 7
Method: OECD Test Guideline 107

Mobility in soil

Components:

Di-1-adamantylchlorophosphine:

Stability in soil : Remarks: No data available

Carbon tetrachloride:

Stability in soil : Remarks: 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
Warning: Manufactured with Carbon tetrachloride, a substance which harms public health and environment by destroying ozone in the upper atmosphere.

Components:

Di-1-adamantylchlorophosphine:

Additional ecological information : No data available

Carbon tetrachloride:

Ozone-Depletion Potential : 1.1
Regulation: UNEP - Handbook for the Montreal Protocol on Substances that Deplete the Ozone Layer (Update: 2020-01-01)
Group: Annex B - Group II: Carbon tetrachloride

1.1
Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances (Update: 2007-07-01)
Group: Group IV

Additional ecological information : No data available

Endocrine disrupting properties

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No. : UN 3096
Proper shipping name : Corrosive solid, water-reactive, n.o.s.
(Di-1-adamantylchlorophosphine)
Class : 8
Subsidiary risk : 4.3
Packing group : II
Labels : Class 8 - Corrosive substances, Division 4.3 -
Substances which in contact with water emit
flammable gases
Packing instruction (cargo : 863
aircraft)
Packing instruction : 859
(passenger aircraft)

IMDG-Code

UN number : UN 3096
Proper shipping name : CORROSIVE SOLID, WATER-REACTIVE, N.O.S.
(Di-1-adamantylchlorophosphine)
Class : 8
Subsidiary risk : 4.3
Packing group : II
Labels : 8 (4.3)
EmS Code : F-G, S-L
Marine pollutant : no

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

National Regulations

49 CFR

UN/ID/NA number : UN 3096
Proper shipping name : Corrosive solids, water-reactive, n.o.s.
(Di-1-adamantylchlorophosphine)
Class : 8

Subsidiary risk : 4.3
Packing group : II
Labels : Class 8 - Corrosive substances, Division 4.3 -
Substances which in contact with water emit
flammable gases
ERG Code : 138
Marine pollutant : no
Poison Inhalation Hazard : No

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Carbon tetrachloride	56-23-5	10	285
Carbon tetrachloride	56-23-5	10	10 (D019)
Carbon tetrachloride	56-23-5	10	10 (F001)

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS 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 : Acute Health Hazard
Chronic Health Hazard

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

Carbon 56-23-5 >= 1 - < 5 %
tetrachloride

Clean Air Act

Warning: Manufactured with Carbon tetrachloride, a substance which harms public health and environment by destroying ozone in the upper atmosphere.

UNEP - Handbook for the : carbon tetrachloride 56-23-5
Montreal Protocol on
Substances that Deplete
the Ozone LayerOzone-
Depletion Potential

40 CFR Protection of Environment; Part 82
Protection of Stratospheric Ozone -
CAA Section 602 Class I
SubstancesOzone-
Depletion Potential : Carbon Tetrachloride 56-23-5

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

Carbon tetrachloride 56-23-5 $\geq 1 - < 5 \%$

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).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

Carbon tetrachloride 56-23-5 $\geq 1 - < 5 \%$

Clean Water Act

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

Carbon tetrachloride 56-23-5 $\geq 1 - < 5 \%$

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

Carbon tetrachloride 56-23-5 $\geq 1 - < 5 \%$

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

Carbon tetrachloride 56-23-5 $\geq 1 - < 5 \%$

This product contains the following priority pollutants related to the U.S. Clean Water Act:

Carbon tetrachloride 56-23-5 $\geq 1 - < 5 \%$

US State Regulations

Massachusetts Right To Know

Carbon tetrachloride 56-23-5

Pennsylvania Right To Know

Carbon tetrachloride 56-23-5

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

California Prop. 65

WARNING: This product can expose you to chemicals including Carbon tetrachloride, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov. **International Regulations**

Montreal Protocol : Carbon tetrachloride

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

US TSCA : Product contains substance(s) not listed on TSCA inventory.

TSCA list

No substances are subject to a Significant New Use Rule.

After June 16, 2025, this chemical substance (as defined in TSCA section 3(2)) may not be distributed in commerce or processed in greater than trace quantities for the following purposes: Incorporation into formulation, mixture or reaction products in petrochemical-derived manufacturing except in the manufacture of vinyl chloride; Industrial and commercial use as an industrial processing aid in the manufacture of petrochemicals-derived products except in the manufacture of vinyl chloride; Industrial and commercial use in the manufacture of other basic chemicals (including manufacturing of chlorinated compounds used in solvents, adhesives, asphalt, and paints and coatings), except for use in the elimination of nitrogen trichloride in the production of chlorine and caustic soda and the recovery of chlorine in tail gas from the production of chlorine; Industrial and commercial use in metal recovery; Industrial and commercial use as an additive; and beginning December 18, 2025, industrial and commercial specialty uses by the U.S. Department of Defense.

The following substance(s) is/are subject to TSCA 12(b) export notification requirements:
Carbon tetrachloride 56-23-5

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	: USA. NIOSH Recommended Exposure Limits
OSHA Z-2	: USA. Occupational Exposure Limits (OSHA) - Table Z-2
TSCA ECEL	: TSCA Existing Chemical Exposure Limit
ACGIH / TWA	: 8-hour, time-weighted average
ACGIH / STEL	: Short-term exposure limit
NIOSH REL / ST	: STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA Z-2 / TWA	: 8-hour time weighted average
OSHA Z-2 / CEIL	: Acceptable ceiling concentration
OSHA Z-2 / Peak	: Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift
TSCA ECEL / ECEL-TWA	: Existing Chemical Exposure List (TWA)

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 - 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;

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GHS - Globally Harmonised 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 Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; 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 - Organisation 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

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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