

SAFETY DATA SHEET

Version 6.15 Revision Date 05/20/2025 Print Date 05/21/2025

SECTION 1. IDENTIFICATION

1.1 Product identifiers

Product name : Benzyl chloride

Product Number : 185558 Brand : Aldrich

Index-No. : 602-037-00-3 CAS-No. : 100-44-7

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

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : 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)

Flammable liquids : Category 4

Acute toxicity (Oral) : Category 4

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Acute toxicity (Inhalation)

: Category 3

Skin irritation : Category 2

Serious eye damage : Category 1

Skin sensitisation : Category 1

Germ cell mutagenicity : Category 1B

Carcinogenicity : Category 1B

Specific target organ toxicity - repeated exposure (Oral) : Category 2 (Heart, forestomach)

Short-term (acute)

aquatic hazard

: Category 2

Other hazards

None known.

GHS label elements

Hazard pictograms









Signal Word : Danger

Hazard Statements : H227 Combustible liquid.

H302 Harmful if swallowed. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H331 Toxic if inhaled.

H335 May cause respiratory irritation. H340 May cause genetic defects.

H350 May cause cancer.

H373 May cause damage to organs (Heart,

forestomach) through prolonged or repeated exposure

if swallowed.

H401 Toxic to aquatic life.

Supplemental Hazard

Statements

: Corrosive to the respiratory tract.

Precautionary statements : **Prevention:**

P201 Obtain special instructions before use.

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P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260 Do not breathe mist or vapours.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing must not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves, protective clothing, eye protection and face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. P302 + P352 IF ON SKIN: Wash with plenty of water. P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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

P308 + P313 IF exposed or concerned: Get medica advice/ attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

Disposal:

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Components

Chemical name	CAS No./Unique ID	Concentration (% w/w)	Trade secret
Benzyl chloride	100-44-7*	>= 80 - <= 100	TSC

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propylene oxide	75-56-9*	>= 0.1 - <= 1	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. Immediately call in

physician.

If breathing stops: immediately apply artificial

respiration, if necessary also oxygen.

In case of skin contact : In case of skin contact: Take off immediately all

contaminated clothing. Rinse skin with water/ shower.

Consult a physician.

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: immediately make victim drink

water (two glasses at most).

Consult a physician.

Most important symptoms and effects,

symptoms and effects, both acute and delayed : The most important known symptoms and effects are described in the labelling (see section 2.2) 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

: Water

Foam

Carbon dioxide (CO2)

Dry powder

Unsuitable extinguishing

media

: For this substance/mixture no limitations of

extinguishing agents are given.

Specific hazards during

fire fighting

: Mixture with combustible ingredients.

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Vapours are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

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

Hazardous combustion products

: Carbon oxides

Hydrogen chloride gas

Specific extinguishing methods

: No data available

Further information

: Remove container from danger zone and cool with

water.

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: Do not breathe vapours, aerosols.

Avoid substance contact. Ensure adequate ventilation.

Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency

procedures, consult an expert. Advice for emergency responders: For personal protection see section 8.

Environmental precautions

: Do not let product enter drains.

Methods and materials

: Cover drains. Collect, bind, and pump off spills.

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for containment and cleaning up

Observe possible material restrictions (see sections 7

and 10).

Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected

area.

SECTION 7. HANDLING AND STORAGE

For precautions see section 2.2.

Advice on protection against fire and explosion

: Keep away from open flames, hot surfaces and

sources of ignition.

Take precautionary measures against static discharge.

Advice on safe handling

: Work under hood. Do not inhale substance/mixture.

Avoid generation of vapours/aerosols.

Further information on storage conditions

: Tightly closed.

Keep in a well-ventilated place.

Keep locked up or in an area accessible only to

qualified or authorised persons.

Storage class : 6.1A, Combustible, acute toxic Cat. 1 and 2 / very

toxic hazardous materials

Recommended storage

temperature

: Recommended storage temperature see product label.

Further information on

storage stability

: Light sensitive. Moisture sensitive.

Packaging material : Suitable material: Poly-lined Steel Drum

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Benzyl chloride	100-44-7	TWA	1 ppm	ACGIH
		С	1 ppm 5 mg/m3	NIOSH REL
		TWA	1 ppm 5 mg/m3	OSHA Z-1
propylene oxide	75-56-9	TWA	2 ppm	ACGIH
		TWA	100 ppm 240 mg/m3	OSHA Z-1

Engineering measures : No data available

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Personal protective equipment

Respiratory protection : required when vapours/aerosols 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:

: Respirator.

The entrepeneur 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 : Viton®
Break through time : 480 min
Glove thickness : 0.7 mm
Protective index : Full contact

Manufacturer : Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Material : Chloroprene
Break through time : 30 min
Glove thickness : 0.65 mm

Protective index : Splash contact

Manufacturer : KCL 720 Camapren®

Remarks : 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.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : colourless

Odor : stinging

Odor Threshold : No data available pΗ : Not applicable

: -45 °F / -43 °C Melting point/ range

Method: lit.

Boiling point/boiling range : 351 - 358 °F / 177 - 181 °C

Method: lit.

Flash point : 153 °F / 67 °C

Method: c.c., closed cup

Evaporation rate : No data available

: No data available Flammability (solid, gas)

Flammability (liquids) : No data available

Burning rate : No data available

: 1085 °F / 585 °C Self-ignition

1,013 hPa

Upper explosion limit / Upper flammability limit

: Upper explosion limit

14 %(V)

Lower explosion limit / Lower flammability limit : Lower explosion limit

1.1 %(V)

: 1.6 hPa (77 °F / 25 °C) Vapor pressure

Relative vapour density : 4.36

: 1.1 (68 °F / 20 °C) Relative density

: 1.1 g/cm3 (77 °F / 25 °C) Density

Method: lit.

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Solubility(ies)

Water solubility : 0.46 g/l (86 °F / 30 °C)

Partition coefficient: n-

octanol/water

: log Pow: 2.3

Method: (experimental)

(IUCLID) Bioaccumulation is not expected.

Autoignition temperature : $1085 \, ^{\circ}\text{F} / 585 \, ^{\circ}\text{C} (1,013 \, \text{hPa})$

Decomposition temperature

: No data available

Viscosity

Viscosity, dynamic : 1.380 mPa.s (68 °F / 20 °C)

Viscosity, kinematic : No data available

Flow time : No data available

Explosive properties : Not classified as explosive.

Oxidizing properties : none

Molecular weight : 126.58 g/mol

Particle characteristics

Particle size : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point

is to be rated as critical.

Chemical stability : The product is chemically stable under standard

ambient conditions (room temperature) .

Contains the following

stabiliser(s):

Possibility of hazardous

reactions

: propylene oxide (<1 %)

: Violent reactions possible with:

Strong oxidizing agents

amides

substances with a catalytic effect

numerous inorganic and/or organic compounds

Risk of explosion with: polymerisation initiators

Acids

A risk of explosion and/or of toxic gas formation exists

with the following substances:

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Alkali metals

Alkaline earth metals

Metals

Exothermic reaction with:

Water Release of:

Hydrogen chloride gas

Conditions to avoid : Strong heating.

Incompatible materials : No data available

products

Hazardous decomposition : In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Acute toxicity estimate Oral - 1,192.37 mg/kg

(Calculation method)

Acute toxicity estimate Oral - 560 mg/kg

(Calculation method)

LD50 Oral - Rat - male and female - 560 mg/kg

(OECD Test Guideline 401)

Symptoms: Possible damages:, Bloody vomiting

Acute toxicity estimate Inhalation - 0.74 mg/l(Calculation method)

Acute toxicity estimate Inhalation - 4 h - 4.98 mg/l - vapour(Calculation method)

Acute toxicity estimate Inhalation - 4 h - 5 mg/l - vapour

(Expert judgement)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) Symptoms: Cough, Shortness of breath, mucosal irritations, Possible damages:, damage of

respiratory tract, Lung oedema, Symptoms may be delayed.

Inhalation: Irritating to respiratory system.

Acute toxicity estimate Dermal - 124,400 mg/kg

(Calculation method)

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

(Calculation method)

Skin corrosion/irritation

Remarks: Causes skin irritation.

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Serious eye damage/eye irritation

Remarks: Lacrimal irritation due to vapours.

Remarks: Causes serious eye damage.

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

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Result: positive

(OECD Test Guideline 429)

Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: positive

Carcinogenicity

Presumed to have carcinogenic potential for humans

IARC: 2A - Group 2A: Probably carcinogenic to humans (Benzyl chloride)IARC: 2B - Group 2B: Possibly carcinogenic to humans (propylene oxide)

NTP: RAHC - Reasonably anticipated to be a human carcinogen (propylene oxide)

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

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation. - Respiratory system

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Specific target organ toxicity - repeated exposure

Oral - May cause damage to organs through prolonged or repeated exposure.

- Heart, forestomach

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Aspiration hazard

No data available

11.2 Additional Information

RTECS: XS8925000

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea,

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Systemic effects:

Unconsciousness CNS disorders

Damage to:

Kidney Liver

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

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Liver - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

Liver - Irregularities - Based on Human Evidence

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Benzyl chloride:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 4 mg/l

> Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

Toxicity to daphnia and

other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 6.1 mg/l

End point: Immobilization Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

propylene oxide:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 52 mg/l

> End point: mortality Exposure time: 96 h Test Type: static test Method: US-EPA

GLP: yes

Toxicity to daphnia and

other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 350 mg/l

End point: Immobilization Exposure time: 48 h Test Type: static test Method: US-EPA

GLP: yes

Toxicity to algae/aquatic

plants

: ErC50 (Pseudokirchneriella subcapitata (green

algae)): 240 mg/l Exposure time: 96 h Test Type: static test Method: US-EPA

GLP: yes

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Toxicity to fish (Chronic : EC50 (Poecilia reticulata (guppy)): 31.9 mg/l

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toxicity) Exposure time: 14 d

Remarks: (Lit.)

Persistence and degradability

Components:

Benzyl chloride:

Biodegradability : aerobic

Inoculum: activated sludge Concentration: 100 mg/l Result: Readily biodegradable.

Biodegradation: 71 % Exposure time: 14 d

Method: OECD Test Guideline 301C

Stability in water : Test substance: Water

Remarks: Rapid degradation.

propylene oxide:

Biodegradability : aerobic

Inoculum: activated sludge Concentration: 100 mg/l Result: Readily biodegradable.

Biodegradation: 96 % Exposure time: 28 d

Method: OECD Test Guideline 301C

Stability in water : Degradation half life: 15.7 yr

Remarks: reaction with hydroxyl radicals

(calculated)

Degradation half life: ca. 11 d

Remarks: Hydrolysis

Bioaccumulative potential

Components:

Benzyl chloride:

Partition coefficient: n- : log Pow: 2.3

octanol/water Method: (experimental)
Remarks: (IUCLID)

Bioaccumulation is not expected.

propylene oxide:

Bioaccumulation : Remarks: Due to the distribution coefficient n-

octanol/water, accumulation in organisms is not

expected.

Partition coefficient: n- : log Pow: < 1 (68 °F / 20 °C)

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octanol/water pH: 6.8

Method: (experimental)

GLP: yes

Remarks: Bioaccumulation is not expected.

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).

Components:

Benzyl chloride:

Additional ecological

information

: Discharge into the environment must be avoided.

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 1738

Proper shipping name : Benzyl chloride

Class : 6.1 Subsidiary risk : 8 Packing group : II

Labels : Division 6.1 - Toxic substances, Class 8 - Corrosive

substances

Packing instruction (cargo: 660

aircraft)

Packing instruction : 653

(passenger aircraft)

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IMDG-Code

UN number : UN 1738

Proper shipping name : BENZYL CHLORIDE

Class : 6.1
Subsidiary risk : 8
Packing group : II
Labels : 6.1 (8)
EmS Code : F-A, S-B
Marine pollutant : no

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

National Regulations

49 CFR Road

UN/ID/NA number : UN 1738

Proper shipping name : Benzyl chloride

Class : 6.1 Subsidiary risk : 8 Packing group : II

Labels : Division 6.1 - Toxic substances, Class 8 - Corrosive

substances

ERG Code : 156 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 RO (lbs)
Benzyl chloride	100-44-7	100	100

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component	Calculated product
		RQ (lbs)	RQ (lbs)
Benzyl chloride	100-44-7	100	100

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

-		
Components	CAS-No.	Component TPQ (lbs)
Benzyl chloride	100-44-7	500

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SARA 311/312 : Fire Hazard

Hazards Acute Health Hazard

Chronic Health Hazard

SARA 313 : The following components are subject to reporting

levels established by SARA Title III, Section 313:

Benzyl chloride 100-44-7 >= 90 - <= 100 %

75-56-9 >= 0.1 - < 1 % propylene

oxide

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

Benzyl chloride 100-44-7 >= 90 - <= 100 %

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 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

> >= 90 - <= 100 % Benzyl chloride 100-44-7

Clean Water Act

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

100-44-7 >= 90 - <= 100 % Benzyl chloride 75-56-9 propylene oxide >= 0.1 - < 1 %

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

> >= 90 - <= 100 % Benzyl chloride 100-44-7 75-56-9 >= 0.1 - < 1 % propylene oxide

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

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

US State Regulations

Massachusetts Right To Know

Benzyl chloride 100-44-7 propylene oxide 75-56-9

Pennsylvania Right To Know

Benzyl chloride 100-44-7 propylene oxide 75-56-9

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

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Washington Chemicals of High Concern

Product does not contain any listed chemicals

California Prop. 65

WARNING: This product can expose you to chemicals including Benzyl chloride, propylene oxide, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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

TSCA : All substances listed as active on the TSCA inventory

TSCA list

No substances are subject to a Significant New Use Rule.

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

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-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-

1 Limits for Air Contaminants: 8-hour, time-weighted average

ACGIH / TWA : 8-hour, time-weighted average NIOSH REL / C : Ceiling value not be exceeded at any time.

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 - 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

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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

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