

SAFETY DATA SHEET

according to the OSHA
Hazard Communication Standard

Version 6.20
Revision Date 07/14/2026
Print Date 07/15/2026

SECTION 1. IDENTIFICATION

1.1 Product identifiers

Product name : EPA CLP Semivolatiles Surrogate Standards Mix

Product Number : 46824-U
Brand : Supelco

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 February 3, 2025, this chemical substance (as defined in TSCA section 3(2))/product cannot be distributed in commerce to retailers. After January 28, 2026, this chemical substance (as defined in TSCA section 3(2))/product is and can only be distributed in commerce or processed with a concentration of methylene chloride equal to or greater than 0.1% by weight for the following purposes: (1) Processing as a reactant; (2) Processing for incorporation into a formulation, mixture, or reaction product; (3) Processing for repackaging; (4) Processing for recycling; (5) Industrial or commercial use as a laboratory chemical; (6) Industrial or commercial use as a bonding agent for solvent welding; (7) Industrial and commercial use as a paint and coating remover from safety critical, corrosion-sensitive components of aircraft and spacecraft; (8) Industrial and commercial use as a processing aid; (9) Industrial and commercial use for plastic and rubber products manufacturing; (10) Industrial and commercial use as a solvent that becomes part of a formulation or mixture, where that formulation or mixture will be used inside a manufacturing process, and the solvent (methylene chloride) will be reclaimed; (11) Industrial and commercial use in the refinishing for wooden furniture, decorative pieces, and architectural fixtures of artistic, cultural or historic value until May 8, 2029; (12) Industrial and commercial use in adhesives and sealants in aircraft, space vehicle, and turbine applications for structural and safety critical non-structural applications until May 8, 2029; (13) Disposal; and (14) Export.

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

Skin irritation : Category 2

Eye irritation : Category 2A

Skin sensitisation : Category 1

Carcinogenicity : Category 2

Reproductive toxicity : Category 1B

Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

Short-term (acute) aquatic hazard : Category 3

Long-term (chronic) aquatic hazard : Category 3

Other hazards

None known.

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H315 Causes skin irritation.
H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H360 May damage fertility or the unborn child.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements :

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing mist or vapours.
P264 Wash skin thoroughly after handling.
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/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.

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 : Mixture

CAS-No. : Not Assigned

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Components

Chemical name	CAS No./Unique ID	Concentration (% w/w)	Trade secret
Dichloromethane	75-09-2*	$\geq 80 - \leq 100$	TSC
Phenol-D6	13127-88-3*	$\geq 0.1 - \leq 1$	TSC
2,4,6-Tribromophenol	118-79-6*	$\geq 0.1 - \leq 1$	TSC
1,2-dichlorobenzene-d4	2199-69-1*	$\geq 0.1 - \leq 1$	TSC
nitrobenzene-d5	4165-60-0*	$\geq 0.1 - \leq 1$	TSC
2-Chlorophenol-3,4,5,6-d4	93951-73-6*	$\geq 0.1 - \leq 1$	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	: 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. Consult a physician.
In case of eye contact	: After eye contact: rinse out with plenty of water. 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, 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	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	: For this substance/mixture no limitations of extinguishing agents are given.
Specific hazards during fire fighting	: Not combustible.
	Ambient fire may liberate hazardous vapours.
Hazardous combustion products	: Carbon oxides
	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: Do not breathe vapours, aerosols. 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.

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 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 GHS label elements

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 : 6.1D, Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

Recommended storage temperature : 36 - 46 °F / 2 - 8 °C

/

Further information on storage stability : Store under inert gas.
Heat sensitive.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Dichloromethane	75-09-2	TWA	50 ppm	ACGIH
		PEL	25 ppm	OSHA CARC
		STEL	125 ppm	OSHA CARC
		ECEL-TWA	2 ppm 8 mg/m ³	TSCA ECEL
		EPA STEL	16 ppm 57 mg/m ³	TSCA ECEL
Phenol-D6	13127-88-3	TWA	5 ppm	ACGIH

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		TWA	5 ppm 19 mg/m ³	NIOSH REL
		C	15.6 ppm 60 mg/m ³	NIOSH REL
		TWA	5 ppm 19 mg/m ³	OSHA Z-1
1,2-dichlorobenzene-d ₄	2199-69-1	TWA	25 ppm	ACGIH
		STEL	50 ppm	ACGIH
		C	50 ppm 300 mg/m ³	NIOSH REL
		C	50 ppm 300 mg/m ³	OSHA Z-1
nitrobenzene-d ₅	4165-60-0	TWA	1 ppm	ACGIH
		TWA	1 ppm 5 mg/m ³	NIOSH REL
		TWA	1 ppm 5 mg/m ³	OSHA Z-1

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Dichloromethane	75-09-2	Dichloromethane	Urine	End of shift (As soon as possible after exposure ceases)	0.3 mg/l	ACGIH BEI
Phenol-D6	13127-88-3	Phenol	Urine	End of shift (As soon as possible after exposure ceases)	250 mg/g creatinine	ACGIH BEI
nitrobenzene-d ₅	4165-60-0	Methemoglobin	In blood	During or at the end of the shift	1.5 % Hb	ACGIH BEI

Engineering measures : No data available

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: : Filter type ABEK

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

Remarks : required

Eye protection : Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Safety glasses

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 : liquid

Colour : No data available

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point : No data available

Boiling point/boiling range : No data available

Flash point : Method: closed cup, closed cup
does not flash

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Not applicable

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	: Not classified as explosive.
Oxidizing properties	: none
Particle characteristics Particle size	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No data available

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The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

MILLIPORE
SIGMA

Chemical stability	: The product is chemically stable under standard ambient conditions (room temperature) .
Possibility of hazardous reactions	: No data available
Conditions to avoid	: no information available
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Mixture

Acute toxicity

Acute toxicity estimate Oral - 2,084 mg/kg
(Calculation method)

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: Mixture causes skin irritation.

Serious eye damage/eye irritation

Remarks: Mixture causes serious eye irritation.

Respiratory or skin sensitization

Mixture may cause an allergic skin reaction.

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: 2A - Group 2A: Probably carcinogenic to humans (Dichloromethane)

IARC: 2B - Group 2B: Possibly carcinogenic to humans (nitrobenzene-d₅)

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

NTP: RAHC - Reasonably anticipated to be a human carcinogen (nitrobenzene-d₅)

OSHA: OSHA specifically regulated carcinogen (Dichloromethane)

Reproductive toxicity

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

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

Stomach - Irregularities - Based on Human Evidence

Components**Dichloromethane****Acute toxicity**

LD50 Oral - Rat - male and female - > 2,000 mg/kg
(OECD Test Guideline 401)

LC50 Inhalation - Mouse - 4 h - 86 mg/l - vapour

Remarks: (ECHA)

Symptoms: Possible damages: , mucosal irritations

LD50 Dermal - Rat - male and female - > 2,000 mg/kg
(OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit

Result: Irritations - 4 h

(OECD Test Guideline 404)

Remarks: Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Eye irritation

Remarks: (ECHA)

Remarks: Risk of corneal clouding.

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: negative

(OECD Test Guideline 429)

Germ cell mutagenicity

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Result: positive

Test Type: Ames test

Test system: Salmonella typhimurium

Result: positive

Method: OECD Test Guideline 474

Species: Mouse - male and female - Bone marrow

Result: negative

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause drowsiness or dizziness. - Central nervous system

Acute inhalation toxicity - Possible damages: mucosal irritations

Specific target organ toxicity - repeated exposure**Aspiration hazard**

No data available

Phenol-D6**Acute toxicity**

Acute toxicity estimate Oral - 100.1 mg/kg

(Expert judgement)

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

The value is given in analogy to the following substances: Phenol

Acute toxicity estimate Inhalation - 0.51 mg/l - dust/mist

(Expert judgement)

Symptoms: Irritation, Lung oedema

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

The value is given in analogy to the following substances: Phenol

Dermal: No data available

Skin corrosion/irritation

Skin - In vitro study

Result: Causes burns.

(OECD Test Guideline 431)

Remarks: The value is given in analogy to the following substances: Phenol

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Corrosive

(OECD Test Guideline 405)

Remarks: The value is given in analogy to the following substances: Phenol

Remarks: Causes serious eye damage.

Risk of blindness!

Respiratory or skin sensitization

Sensitisation test: - Guinea pig

Result: negative

Remarks: (IUCLID)

The value is given in analogy to the following substances: Phenol

Germ cell mutagenicity

Suspected of causing genetic defects.

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Result: positive

Remarks: The value is given in analogy to the following substances: Phenol

Test Type: Mutagenicity (mammal cell test): micronucleus.
Test system: Chinese hamster ovary cells
Result: positive
Remarks: The value is given in analogy to the following substances: Phenol

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Acute inhalation toxicity - Irritation, Lung oedema

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

- Nervous system, Kidney, Liver, Skin

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

The value is given in analogy to the following substances: Phenol

Aspiration hazard

No data available

2,4,6-Tribromophenol

Acute toxicity

LD50 Oral - Rat - male and female - 3,704 mg/kg

LC50 Inhalation - Rat - male and female - 4 h - > 1.63 mg/l

LD50 Dermal - Rat - male and female - > 2,000 mg/kg

(OECD Test Guideline 402)

No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Irritating to eyes.

(OECD Test Guideline 405)

Respiratory or skin sensitization

Maximisation Test - Guinea pig

May cause sensitisation by skin contact.

(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: in vitro assay

Test system: *S. typhimurium*

Result: negative

Method: Mutagenicity (micronucleus test)

Species: Mouse - male and female

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Aspiration hazard

No data available

1,2-dichlorobenzene-d4

Acute toxicity

LD50 Oral - Rat - male and female - 2,000 mg/kg

(OECD Test Guideline 401)

Remarks: (Regulation (EC) No 1272/2008, Annex VI)

The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Acute toxicity estimate Inhalation - 4 h - 11.1 mg/l - vapour

(Expert judgement)

Remarks: The value is given in analogy to the following substances: 1,2-Dichlorobenzene

LD50 Dermal - Rabbit - > 10,000 mg/kg

Remarks: (RTECS)

The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Skin corrosion/irritation

Skin - Rabbit

Result: Skin irritation - 24 h

(OECD Test Guideline 404)

Remarks: The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.

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

The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: positive

(OECD Test Guideline 429)

Remarks: The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Remarks: The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Result: negative

Remarks: The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

Remarks: The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Method: OECD Test Guideline 474

Species: Rat - male - Red blood cells (erythrocytes)

Result: negative

Remarks: The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Method: OECD Test Guideline 489

Species: Rat - male - Bone marrow

Result: negative

Remarks: The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation. - Respiratory Tract

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

The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Specific target organ toxicity - repeated exposure**Aspiration hazard**

No data available

nitrobenzene-d5**Acute toxicity**

Acute toxicity estimate Oral - 100 mg/kg

(Expert judgement)

Remarks: Blood: Methemoglobinemia-Carboxyhemoglobin.

(Regulation (EC) No 1272/2008, Annex VI)

The value is given in analogy to the following substances: Nitrobenzene

LC50 Inhalation - Rat - 4 h - 2.81 mg/l - vapour
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Lacrimation.
Behavioral: Tremor.
(RTECS)
The value is given in analogy to the following substances: Nitrobenzene
LD50 Dermal - Rabbit - 760 mg/kg
Remarks: (ECHA)
The value is given in analogy to the following substances: Nitrobenzene

Skin corrosion/irritation

Skin - Rabbit
Result: No skin irritation - 24 h
Remarks: (ECHA)
The value is given in analogy to the following substances: Nitrobenzene

Serious eye damage/eye irritation

Eyes - Rabbit
Result: No eye irritation
Remarks: (ECHA)
The value is given in analogy to the following substances: Nitrobenzene

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse
Result: negative
(OECD Test Guideline 429)
Remarks: The value is given in analogy to the following substances: Nitrobenzene

Germ cell mutagenicity

Test Type: Ames test
Test system: Salmonella typhimurium
Result: negative
Remarks: (ECHA)
The value is given in analogy to the following substances: Nitrobenzene
Method: OECD Test Guideline 474
Species: Mouse - male and female - Bone marrow
Result: negative
Remarks: The value is given in analogy to the following substances: Nitrobenzene
Method: OECD Test Guideline 486
Species: Rat - male - Liver cells
Result: negative
Remarks: The value is given in analogy to the following substances: Nitrobenzene

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

May damage fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Inhalation - Causes damage to organs through prolonged or repeated exposure.
- Blood

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

The value is given in analogy to the following substances: Nitrobenzene

Aspiration hazard

No data available

2-Chlorophenol-3,4,5,6-d4

Acute toxicity

LD50 Oral - Rat - male and female - 2,000 mg/kg

(OECD Test Guideline 401)

Remarks: The value is given in analogy to the following substances: 2-chlorophenol

LC50 Inhalation - Rat - male and female - 4 h - $\geq$ 4.77 mg/l - vapour

(OECD Test Guideline 403)

Remarks: The value is given in analogy to the following substances: 2-chlorophenol

LD50 Dermal - Rat - male and female - 1,000 - 1,580 mg/kg

Remarks: (ECHA)

The value is given in analogy to the following substances: 2-chlorophenol

Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns.

Remarks: (ECHA)

The value is given in analogy to the following substances: 2-chlorophenol

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes serious eye damage.

Remarks: (ECHA)

The value is given in analogy to the following substances: 2-chlorophenol

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Remarks: The value is given in analogy to the following substances: 2-chlorophenol

Test Type: Mutagenicity (mammal cell test): micronucleus.

Test system: Chinese hamster lung cells

Result: negative

Remarks: The value is given in analogy to the following substances: 2-chlorophenol

Carcinogenicity

No data available

Reproductive toxicity

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

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****Dichloromethane:**

- Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 193.00 mg/l
End point: mortality
Exposure time: 96 h
Test Type: flow-through test
Analytical monitoring: yes
Remarks: (ECHA)
- Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 27 mg/l
End point: mortality
Exposure time: 48 h
Test Type: static test
Method: US-EPA
- Toxicity to fish (Chronic toxicity) : LC50 (Pimephales promelas (fathead minnow)): 471 mg/l
End point: mortality
Exposure time: 8 d
Test Type: flow-through test
Analytical monitoring: yes
Remarks: (ECHA)
- Toxicity to microorganisms : EC50 (activated sludge): 2,590 mg/l
Exposure time: 40 min
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 209

Phenol-D6:

- Toxicity to fish : LC50 (Onchorhynchus clarki): 8.9 mg/l
Exposure time: 96 h
Test Type: flow-through test
Analytical monitoring: yes
Method: US-EPA
Remarks: The value is given in analogy to the following substances:
The value is given in analogy to the following substances: Phenol
- Toxicity to daphnia and : EC50 (Ceriodaphnia dubia (water flea)): 3.1 mg/l

other aquatic
invertebrates

End point: Immobilization
Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes
Method: US-EPA
Remarks: The value is given in analogy to the
following substances:
The value is given in analogy to the following
substances: Phenol

Toxicity to algae/aquatic plants : EC50 (*Pseudokirchneriella subcapitata* (algae)): 61.1 mg/l

Exposure time: 96 h
Test Type: static test
Method: US-EPA
Remarks: The value is given in analogy to the
following substances:
The value is given in analogy to the following
substances: Phenol

Toxicity to fish (Chronic toxicity) : NOEC (Fish): 0.077 mg/l
Exposure time: 60 d

Test Type: semi-static test
Remarks: (ECHA)
The value is given in analogy to the following
substances:
The value is given in analogy to the following
substances: Phenol

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (*Daphnia magna* (Water flea)): 0.16 mg/l
End point: Growth inhibition
Exposure time: 16 d

Test Type: semi-static test
Remarks: (ECHA)
The value is given in analogy to the following
substances:
The value is given in analogy to the following
substances: Phenol

Toxicity to microorganisms : IC50 (microorganisms): 21 mg/l
Exposure time: 24 h

Test Type: static test
Remarks: (ECHA)
The value is given in analogy to the following
substances:
The value is given in analogy to the following
substances: Phenol

2,4,6-Tribromophenol:

Toxicity to fish : LC50 (*Oryzias latipes* (Orange-red killifish)): 1.5 mg/l
Exposure time: 96 h

Test Type: semi-static test
Analytical monitoring: yes
Method: OECD Test Guideline 203
GLP: yes
Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.26 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (algae)): 0.4 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia (water flea)): 0.1 mg/l
End point: reproduction rate
Exposure time: 21 d
Analytical monitoring: yes
Method: OECD Test Guideline 211
GLP: yes

NOEC (Daphnia (water flea)): 0.025 mg/l
End point: mortality
Exposure time: 21 d
Analytical monitoring: yes
Method: OECD Test Guideline 211
GLP: yes

1,2-dichlorobenzene-d4:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1.58 mg/l
End point: mortality
Exposure time: 96 h
Test Type: flow-through test
Analytical monitoring: yes
Remarks: (ECHA)
The value is given in analogy to the following substances:
The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Toxicity to daphnia and other aquatic invertebrates : EC50 (Ceriodaphnia dubia (water flea)): 0.66 mg/l
End point: Immobilization
Exposure time: 48 h
Test Type: static test

Analytical monitoring: yes
Method: US-EPA
Remarks: The value is given in analogy to the following substances:
The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 2.2 mg/l
Exposure time: 96 h
Analytical monitoring: yes
Method: US-EPA
Remarks: The value is given in analogy to the following substances:
The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC50 (Daphnia magna (Water flea)): 0.55 mg/l
End point: Respiratory function
Exposure time: 14 d
Test Type: semi-static test
Analytical monitoring: yes
Remarks: (ECHA)
The value is given in analogy to the following substances:
The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.
The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.
The value is given in analogy to the following substances: 1,2-Dichlorobenzene

nitrobenzene-d5:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 92 mg/l
End point: mortality
Exposure time: 96 h
Test Type: flow-through test
Analytical monitoring: yes
Method: OECD Test Guideline 203
Remarks: The value is given in analogy to the following substances:
The value is given in analogy to the following substances: Nitrobenzene

Toxicity to daphnia and : EC50 (Daphnia magna (Water flea)): 35 mg/l

other aquatic
invertebrates

End point: Immobilization
Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes
Remarks: (ECHA)
The value is given in analogy to the following
substances:
The value is given in analogy to the following
substances: Nitrobenzene

Toxicity to algae/aquatic
plants

: ErC50 (*Chlorella pyrenoidosa*): 18 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 201
Remarks: The value is given in analogy to the
following substances:
The value is given in analogy to the following
substances: Nitrobenzene

Toxicity to fish (Chronic
toxicity)

: LC50 (*Oncorhynchus mykiss* (rainbow trout)): 0.002
mg/l
End point: mortality
Exposure time: 23 d
Test Type: flow-through test
Analytical monitoring: yes
Remarks: (ECHA)
The value is given in analogy to the following
substances:
The value is given in analogy to the following
substances: Nitrobenzene

Toxicity to daphnia and
other aquatic
invertebrates (Chronic
toxicity)

: NOEC (*Daphnia magna* (Water flea)): 2.6 mg/l
End point: reproduction rate
Exposure time: 21 d
Test Type: semi-static test
Analytical monitoring: yes
Remarks: (ECHA)
The value is given in analogy to the following
substances:
The value is given in analogy to the following
substances: Nitrobenzene

Toxicity to
microorganisms

: EC20 (activated sludge): 1,000 mg/l
Exposure time: 30 min
Test Type: static test
Method: OECD Test Guideline 209
Remarks: The value is given in analogy to the
following substances:
The value is given in analogy to the following
substances: Nitrobenzene

Ecotoxicology Assessment

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

2-Chlorophenol-3,4,5,6-d4:

Toxicity to fish	: LC50 (Lepomis macrochirus (Bluegill)): 5.7 - 12 mg/l Exposure time: 96.0 h Remarks: (ECOTOX Database) The value is given in analogy to the following substances: The value is given in analogy to the following substances: 2-chlorophenol
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 3.91 mg/l End point: Immobilization Exposure time: 48 h Remarks: (ECOTOX Database) The value is given in analogy to the following substances: The value is given in analogy to the following substances: 2-chlorophenol
Toxicity to algae/aquatic plants	: EC50 (Pseudokirchneriella subcapitata (green algae)): 70.00 mg/l Exposure time: 96 h Remarks: (ECOTOX Database) The value is given in analogy to the following substances: The value is given in analogy to the following substances: 2-chlorophenol
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC (Daphnia magna (Water flea)): 1 mg/l Exposure time: 2 d Remarks: (ECOTOX Database) The value is given in analogy to the following substances: The value is given in analogy to the following substances: 2-chlorophenol
Toxicity to microorganisms	: EC50 (Photobacterium phosphoreum): 6.8 mg/l Exposure time: 1 h Test Type: microtox test Remarks: (IUCLID) The value is given in analogy to the following substances: The value is given in analogy to the following substances: 2-chlorophenol

Persistence and degradability

Components:

Dichloromethane:

Biodegradability : aerobic
Inoculum: activated sludge, non-adapted
Concentration: 5 mg/l
Result: Readily biodegradable.
Biodegradation: 68 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
GLP: yes

Phenol-D6:

Biodegradability : aerobic
Inoculum: activated sludge
Concentration: 100 mg/l
Result: Readily biodegradable.
Biodegradation: 62 %
Exposure time: 100 h
Method: OECD Test Guideline 301C
Remarks: The value is given in analogy to the following substances:
The value is given in analogy to the following substances: Phenol

2,4,6-Tribromophenol:

Biodegradability : Remarks: No data available

1,2-dichlorobenzene-d₄:

Biodegradability : aerobic
Inoculum: activated sludge
Concentration: 100 mg/l
Result: Not readily biodegradable.
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 301C
Remarks: The value is given in analogy to the following substances:
The value is given in analogy to the following substances: 1,2-Dichlorobenzene

nitrobenzene-d₅:

Biodegradability : aerobic
Inoculum: activated sludge, non-adapted
Concentration: 100 mg/l
Result: Readily biodegradable.
Biodegradation: 50 %
Exposure time: 28 d

Method: OECD Test Guideline 301F
GLP: yes
Remarks: The value is given in analogy to the following substances:
The value is given in analogy to the following substances: Nitrobenzene

2-Chlorophenol-3,4,5,6-d4:

Biodegradability : aerobic
Concentration: 100 mg/l
Result: Not readily biodegradable.
Biodegradation: 0 %
Exposure time: 14 d
Method: OECD Test Guideline 301C
Remarks: The value is given in analogy to the following substances:
The value is given in analogy to the following substances: 2-chlorophenol

Bioaccumulative potential

Components:

Dichloromethane:

Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 2 - 5.4
Exposure time: 6 Weeks
Concentration: 250 µg/l
Method: OECD Test Guideline 305
GLP: yes

Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 6 - 40
Exposure time: 6 Weeks
Concentration: 25 µg/l
Method: OECD Test Guideline 305
GLP: yes

Partition coefficient: n-octanol/water : log Pow: 1.25 (68 °F / 20 °C)
pH: 7
Method: (experimental)
Remarks: Bioaccumulation is not expected.

Phenol-D6:

Bioaccumulation : Species: Danio rerio (zebra fish)
Bioconcentration factor (BCF): 17.5
Exposure time: 5 h
Temperature: 77 °F / 25 °C
Concentration: 2 mg/l
Method: OECD Test Guideline 305
Remarks: Does not bioaccumulate.

The value is given in analogy to the following substances:

The value is given in analogy to the following substances: Phenol

Partition coefficient: n-octanol/water : log Pow: 1.47 (86 °F / 30 °C)
pH: 3 - 8
Remarks: Bioaccumulation is not expected.
The value is given in analogy to the following substances:
The value is given in analogy to the following substances: Phenol

2,4,6-Tribromophenol:

Partition coefficient: n-octanol/water : log Pow: 3.7 (74.3 °F / 23.5 °C)
Method: OECD Test Guideline 117

1,2-dichlorobenzene-d₄:

Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 90 - 260
Exposure time: 56 d
Temperature: 77 °F / 25 °C
Concentration: 0.01 mg/l
Method: OECD Test Guideline 305C
Remarks: The value is given in analogy to the following substances:
The value is given in analogy to the following substances: 1,2-Dichlorobenzene

Partition coefficient: n-octanol/water : log Pow: 3.43 (77 °F / 25 °C)
Method: OECD Test Guideline 123
Remarks: Bioaccumulation is not expected.

nitrobenzene-d₅:

Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 3.1 - 4.8
Exposure time: 42 d
Temperature: 77 °F / 25 °C
Concentration: ca. 0.125 mg/l
Method: OECD Test Guideline 305C
Remarks: The value is given in analogy to the following substances:
The value is given in analogy to the following substances: Nitrobenzene

2-Chlorophenol-3,4,5,6-d₄:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill)
Bioconcentration factor (BCF): 214
Exposure time: 28 d

Concentration: 0.00918 mg/l
Remarks: The value is given in analogy to the following substances:
The value is given in analogy to the following substances: 2-chlorophenol

Mobility in soil

No data available

Other adverse effects

Components:

Dichloromethane:

Results of PBT and vPvB assessment : Not persistent, bioaccumulative, and toxic (PBT). Not very persistent and very bioaccumulative (vPvB).
: Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

Phenol-D6:

Results of PBT and vPvB assessment : Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.
Remarks: The value is given in analogy to the following substances:
The value is given in analogy to the following substances: Phenol

1,2-dichlorobenzene-d4:

Results of PBT and vPvB assessment : Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

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 1593
Proper shipping name : Dichloromethane solution
Class : 6.1
Packing group : III
Labels : Division 6.1 - Toxic substances
Packing instruction (cargo aircraft) : 663
Packing instruction (passenger aircraft) : 655

IMDG-Code

UN number : UN 1593
Proper shipping name : DICHLOROMETHANE SOLUTION

Class : 6.1
Packing group : III
Labels : 6.1
EmS Code : F-A, S-A
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 1593
Proper shipping name : Dichloromethane SOLUTION

Class : 6.1

Packing group : III
Labels : Division 6.1 - Toxic substances
ERG Code : 160
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	Calculated product
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		RQ (lbs)	RQ (lbs)
Dichloromethane	75-09-2	1000	1000
1,2-dichlorobenzene-d ₄	2199-69-1	10	10 (F002)
nitrobenzene-d ₅	4165-60-0	1000	1000 (D036)
nitrobenzene-d ₅	4165-60-0	100	100 (F004)

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 : Acute Health Hazard
Chronic Health Hazard

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

Dichloromethane	75-09-2	>= 90 - <= 100 %
nitrobenzene-d ₅	4165-60-0	>= 0.1 - < 1 %
2-Chlorophenol-3,4,5,6-d ₄	93951-73-6	>= 0.1 - < 1 %

Clean Water Act

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

Phenol-D6	13127-88-3	>= 0.1 - < 1 %
1,2-dichlorobenzene-d ₄	2199-69-1	>= 0.1 - < 1 %
nitrobenzene-d ₅	4165-60-0	>= 0.1 - < 1 %

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

Phenol-D6	13127-88-3	>= 0.1 - < 1 %
nitrobenzene-d ₅	4165-60-0	>= 0.1 - < 1 %

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

Dichloromethane	75-09-2	>= 90 - <= 100 %
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This product contains the following priority pollutants related to the U.S. Clean Water Act:

Dichloromethane	75-09-2	>= 90 - <= 100 %
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US State Regulations

Massachusetts Right To Know

Dichloromethane	75-09-2
Phenol-D6	13127-88-3
nitrobenzene-d ₅	4165-60-0

Pennsylvania Right To Know

Dichloromethane	75-09-2
Phenol-D6	13127-88-3
1,2-dichlorobenzene-d ₄	2199-69-1
nitrobenzene-d ₅	4165-60-0
4-Terphenyl-d ₁₄	1718-51-0
2-Chlorophenol-3,4,5,6-d ₄	93951-73-6

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Dichloromethane	75-09-2
Phenol-D6	13127-88-3

Washington Chemicals of High Concern

Dichloromethane	75-09-2
Phenol-D6	13127-88-3

California Prop. 65

WARNING: This product can expose you to chemicals including Dichloromethane, nitrobenzene-d₅, 4-Terphenyl-d₁₄, which is/are known to the State of California to cause cancer, and nitrobenzene-d₅, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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 February 3, 2025, this chemical substance (as defined in TSCA section 3(2))/product cannot be distributed in commerce to retailers. After January 28, 2026, this chemical substance (as defined in TSCA section 3(2))/product is and can only be distributed in commerce or processed with a concentration of methylene chloride equal to or greater than 0.1% by weight for the following purposes: (1) Processing as a reactant; (2) Processing for incorporation into a formulation, mixture, or reaction product; (3) Processing for repackaging; (4) Processing for recycling; (5) Industrial or commercial use as a laboratory chemical; (6) Industrial or commercial use as a bonding agent for solvent welding; (7) Industrial and commercial use as a paint and coating remover from safety critical, corrosion-sensitive components of aircraft and spacecraft; (8) Industrial and commercial use as a processing aid; (9) Industrial and commercial use for plastic and rubber products manufacturing; (10) Industrial and commercial use as a solvent that becomes part of a formulation or mixture, where that formulation or mixture will be used inside a manufacturing process, and the solvent (methylene chloride) will be reclaimed; (11) Industrial and commercial use in the refinishing for wooden furniture, decorative pieces, and architectural fixtures of artistic, cultural or historic value until May 8, 2029; (12) Industrial and commercial use in adhesives and sealants in aircraft, space vehicle, and turbine applications for structural and safety critical non-structural applications until May 8, 2029; (13) Disposal; and (14) Export.

The following substance(s) is/are subject to TSCA 12(b) export notification requirements:

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SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	: ACGIH - Biological Exposure Indices (BEI)
NIOSH REL	: USA. NIOSH Recommended Exposure Limits
OSHA CARC	: OSHA Specifically Regulated Chemicals/Carcinogens
OSHA Z-1	: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
TSCA ECEL	: TSCA Existing Chemical Exposure Limit
ACGIH / TWA	: 8-hour, time-weighted average
ACGIH / STEL	: Short-term exposure limit
NIOSH REL / TWA	: Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / C	: Ceiling value not be exceeded at any time.
OSHA CARC / PEL	: Permissible exposure limit (PEL)
OSHA CARC / STEL	: Excursion limit
OSHA Z-1 / TWA	: 8-hour time weighted average
OSHA Z-1 / C	: Ceiling
TSCA ECEL / ECEL-TWA	: Existing Chemical Exposure List (TWA)
TSCA ECEL / EPA STEL	: EPA STEL

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 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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