

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : Custom VOAs Standard 4
 Product code : AL0-130890

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Phenova
 6390 Joyce Dr. Suite 100
 Golden, CO 80403 - United States
 T 1-866-942-2978 - F 1-866-283-0269
info@phenova.com - www.phenova.com

1.4. Emergency telephone number

Emergency number : ChemTel Assistance (US/Canada) 1-800-255-3924
 ChemTel Assistance (International) +1 813-248-0585

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 1	H224	Extremely flammable liquid and vapour
Acute toxicity (oral) Category 3	H301	Toxic if swallowed
Acute toxicity (dermal) Category 2	H310	Fatal in contact with skin
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2	H319	Causes serious eye irritation
Skin sensitization, Category 1	H317	May cause an allergic skin reaction
Germ cell mutagenicity Category 2	H341	Suspected of causing genetic defects
Carcinogenicity Category 1A	H350	May cause cancer
Specific target organ toxicity (single exposure) Category 1	H370	Causes damage to organs
Specific target organ toxicity (repeated exposure) Category 1	H372	Causes damage to organs through prolonged or repeated exposure
Hazardous to the ozone layer Category 1	H420	Harms public health and the environment by destroying ozone in the upper atmosphere

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H224 - Extremely flammable liquid and vapour
 H301 - Toxic if swallowed
 H310 - Fatal in contact with skin
 H315 - Causes skin irritation
 H317 - May cause an allergic skin reaction

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Precautionary statements (GHS US)	: H319 - Causes serious eye irritation H341 - Suspected of causing genetic defects H350 - May cause cancer H370 - Causes damage to organs H372 - Causes damage to organs through prolonged or repeated exposure H420 - Harms public health and the environment by destroying ozone in the upper atmosphere P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P260 - Do not breathe dust/fume/gas/mist/vapors/spray. P261 - Avoid breathing dust/fume/gas/mist/vapors/spray. P262 - Do not get in eyes, on skin, or on clothing. P264 - Wash hands, forearms and face 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. P301+P310 - If swallowed: Immediately call a poison center or doctor P302+P352 - If on skin: Wash with plenty of water P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower 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. P310 - Immediately call a poison center or doctor P314 - Get medical advice/attention if you feel unwell. P332+P313 - If skin irritation occurs: 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. P361+P364 - Take off immediately all contaminated clothing and wash it before reuse. P362+P364 - Take off contaminated clothing and wash it before reuse. P363 - Wash contaminated clothing before reuse. P370+P378 - In case of fire: Use media other than water to extinguish. P403+P235 - Store in a well-ventilated place. Keep cool. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation
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2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc.
methanol (Component)	(CAS-No.) 67-56-1	47.5
allyl alcohol (Component)	(CAS-No.) 107-18-6	2.5
allyl chloride (Component)	(CAS-No.) 107-05-1	2.5
carbon tetrachloride (Component)	(CAS-No.) 56-23-5	2.5
chlorobenzene (Component)	(CAS-No.) 108-90-7	2.5
chloroform (Component)	(CAS-No.) 67-66-3	2.5
1,4-dichlorobenzene (Component)	(CAS-No.) 106-46-7	2.5
1,1-dichloroethane (Component)	(CAS-No.) 75-34-3	2.5
1,2-dichloroethane (Component)	(CAS-No.) 107-06-2	2.5
1,1-dichloroethene (Component)	(CAS-No.) 75-35-4	2.5
cis-1,3-Dichloropropene (Component)	(CAS-No.) 10061-01-5	2.5

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Name	Product identifier	Conc.
1,3-dichloropropene, trans- (Component)	(CAS-No.) 10061-02-6	2.5
1,4-dioxane (Component)	(CAS-No.) 123-91-1	2.5
furan (Component)	(CAS-No.) 110-00-9	2.5
Methylene Chloride (Component)	(CAS-No.) 75-09-2	2.5
1,1,2,2-tetrachloroethane (Component)	(CAS-No.) 79-34-5	2.5
tetrachloroethylene (Component)	(CAS-No.) 127-18-4	2.5
1,1,2-trichloroethane (Component)	(CAS-No.) 79-00-5	2.5
trichloroethylene (Component)	(CAS-No.) 79-01-6	2.5
trichloromonofluoromethane (Component)	(CAS-No.) 75-69-4	2.5

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

- Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
- Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Custom VOAs Standard 4		
ACGIH	Local name	Methanol
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	250 ppm
ACGIH	Remark (ACGIH)	Headache; eye dam; dizziness; nausea
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	260 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	200 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA
allyl alcohol (107-18-6)		
ACGIH	Local name	Allyl alcohol
ACGIH	ACGIH TWA (ppm)	0.5 ppm
ACGIH	Remark (ACGIH)	Eye & URT irr
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	2 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA
allyl chloride (107-05-1)		
ACGIH	Local name	Allyl chloride
ACGIH	ACGIH TWA (ppm)	1 ppm
ACGIH	ACGIH STEL (ppm)	2 ppm
ACGIH	Remark (ACGIH)	Eye & URT irr; liver & kidney dam
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	3 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	1 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA
carbon tetrachloride (56-23-5)		
ACGIH	Local name	Carbon tetrachloride
ACGIH	ACGIH TWA (ppm)	5 ppm
ACGIH	ACGIH STEL (ppm)	10 ppm

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carbon tetrachloride (56-23-5)		
ACGIH	Remark (ACGIH)	Liver dam
ACGIH	Regulatory reference	ACGIH 2018
OSHA	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	200 ppm 5 min. in any 4 hrs.
OSHA	Remark (OSHA)	(2) See Table Z-2.
OSHA	Regulatory reference (US-OSHA)	OSHA
chlorobenzene (108-90-7)		
ACGIH	Local name	Chlorobenzene
ACGIH	ACGIH TWA (ppm)	10 ppm (Chlorobenzene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	Liver dam
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	350 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	75 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA
chloroform (67-66-3)		
ACGIH	Local name	Chloroform
ACGIH	ACGIH TWA (ppm)	10 ppm (Chloroform; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	Liver dam; embryo/fetal dam
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (Ceiling) (mg/m ³)	240 mg/m ³
OSHA	OSHA PEL (Ceiling) (ppm)	50 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA
1,4-dichlorobenzene (106-46-7)		
ACGIH	Local name	p-Dichlorobenzene
ACGIH	ACGIH TWA (ppm)	10 ppm
ACGIH	Remark (ACGIH)	Eye irr; kidney dam
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	450 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	75 ppm
OSHA	OSHA PEL (STEL) (mg/m ³)	675 mg/m ³
OSHA	OSHA PEL (STEL) (ppm)	110 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA
1,1-dichloroethane (75-34-3)		
ACGIH	Local name	1,1-Dichloroethane
ACGIH	ACGIH TWA (ppm)	100 ppm
ACGIH	Remark (ACGIH)	URT & eye irr; liver & kidney dam
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	400 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA
1,2-dichloroethane (107-06-2)		
ACGIH	Local name	Ethylene dichloride
ACGIH	ACGIH TWA (ppm)	10 ppm

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1,2-dichloroethane (107-06-2)		
ACGIH	Remark (ACGIH)	Liver dam; nausea
ACGIH	Regulatory reference	ACGIH 2018
OSHA	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	200 ppm 5 mins. in any 3 hrs.
OSHA	Remark (OSHA)	(2) See Table Z-2.
OSHA	Regulatory reference (US-OSHA)	OSHA
1,1-dichloroethene (75-35-4)		
ACGIH	Local name	Vinylidene chloride
ACGIH	ACGIH TWA (ppm)	5 ppm
ACGIH	Remark (ACGIH)	Liver & kidney dam
ACGIH	Regulatory reference	ACGIH 2018
cis-1,3-Dichloropropene (10061-01-5)		
ACGIH	ACGIH TWA (ppm)	1 ppm
1,3-dichloropropene, trans- (10061-02-6)		
ACGIH	ACGIH TWA (ppm)	1 ppm
1,4-dioxane (123-91-1)		
ACGIH	Local name	1,4-Dioxane
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	Remark (ACGIH)	Liver dam
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	360 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA
furan (110-00-9)		
Not applicable		
Methylene Chloride (75-09-2)		
ACGIH	Local name	Dichloromethane
ACGIH	ACGIH TWA (ppm)	50 ppm
ACGIH	Remark (ACGIH)	COHb-emia; CNS impair
ACGIH	Regulatory reference	ACGIH 2018
OSHA	Remark (OSHA)	(2) See Table Z-2.
OSHA	Regulatory reference (US-OSHA)	OSHA
1,1,2,2-tetrachloroethane (79-34-5)		
ACGIH	Local name	1,1,2,2-Tetrachloroethane
ACGIH	ACGIH TWA (ppm)	1 ppm
ACGIH	Remark (ACGIH)	Liver dam
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	35 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	5 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA
tetrachloroethylene (127-18-4)		
ACGIH	Local name	Tetrachloroethylene
ACGIH	ACGIH TWA (ppm)	25 ppm (Tetrachloroethylene (Perchloroethylene); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)

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tetrachloroethylene (127-18-4)		
ACGIH	ACGIH STEL (ppm)	100 ppm (Tetrachloroethylene (Perchloroethylene); USA; Short time value; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	CNS impair
ACGIH	Regulatory reference	ACGIH 2018
OSHA	Remark (OSHA)	(2) See Table Z-2.
OSHA	Regulatory reference (US-OSHA)	OSHA
1,1,2-trichloroethane (79-00-5)		
ACGIH	Local name	1,1,2-Trichloroethane
ACGIH	ACGIH TWA (ppm)	10 ppm
ACGIH	Remark (ACGIH)	CNS impair; liver dam
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	45 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	10 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA
trichloroethylene (79-01-6)		
ACGIH	Local name	Trichloroethylene
ACGIH	ACGIH TWA (ppm)	10 ppm (Trichloroethylene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	ACGIH STEL (ppm)	25 ppm (Trichloroethylene; USA; Short time value; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	CNS impair; cognitive decrements
ACGIH	Regulatory reference	ACGIH 2018
OSHA	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	300 ppm 5 mins. in any 2 hrs.
OSHA	Remark (OSHA)	(2) See Table Z-2.
OSHA	Regulatory reference (US-OSHA)	OSHA
trichloromonofluoromethane (75-69-4)		
ACGIH	Local name	Trichlorofluoromethane
ACGIH	ACGIH Ceiling (ppm)	1000 ppm (Trichlorofluoromethane; USA; Momentary value; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	Card sens
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	5600 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA
methanol (67-56-1)		
ACGIH	Local name	Methanol
ACGIH	ACGIH TWA (ppm)	200 ppm (Methanol; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	ACGIH STEL (ppm)	250 ppm (Methanol; USA; Short time value; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	Headache; eye dam; dizziness; nausea
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	260 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	200 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA

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8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
	: Colorless
	: characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

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10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Custom VOAs Standard 4	
ATE US (oral)	155.173 mg/kg body weight
ATE US (dermal)	134.721 mg/kg body weight
allyl alcohol (107-18-6)	
LD50 oral rat	99 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 10 day(s))
LD50 dermal rabbit	89 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal, 10 day(s))
LC50 inhalation rat (mg/l)	> 0.24 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Converted value, Inhalation (vapours), 14 day(s))
ATE US (oral)	64 mg/kg body weight
ATE US (dermal)	45 mg/kg body weight
ATE US (gases)	165 ppmV/4h
ATE US (vapors)	0.4 mg/l/4h
ATE US (dust, mist)	0.4 mg/l/4h
allyl chloride (107-05-1)	
LD50 oral rat	275 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	398 mg/kg body weight (24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 inhalation rat (mg/l)	5.6 mg/l (4 h, Rat, Experimental value, Inhalation (vapours), 28 day(s))
ATE US (oral)	275 mg/kg body weight
ATE US (dermal)	398 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	5.6 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
carbon tetrachloride (56-23-5)	
LD50 oral rat	2500 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, ≥ 14 day(s))
LD50 dermal rabbit	> 14900 mg/kg body weight (24 h, Rabbit, Male / female, Experimental value, Dermal)
LC50 inhalation rat (mg/l)	46.26 mg/l (Equivalent or similar to OECD 403, 6 h, Rat, Male, Experimental value, Inhalation (vapours))
ATE US (oral)	100 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h
chlorobenzene (108-90-7)	
LD50 oral rat	> 1427 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; >2000 mg/kg bodyweight; Rat)
LD50 dermal rat	> 2000 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 2200 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (mg/l)	17 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	3630 ppm/4h (Rat)
ATE US (oral)	500 mg/kg body weight
ATE US (gases)	3630 ppmV/4h

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chlorobenzene (108-90-7)	
ATE US (vapors)	17 mg/l/4h
ATE US (dust, mist)	17 mg/l/4h
chloroform (67-66-3)	
LD50 oral rat	695 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 908 mg/kg bodyweight; Rat; OECD 401: Acute Oral Toxicity; Experimental value; 1117 mg/kg bodyweight; Rat)
LD50 dermal rabbit	> 20000 mg/kg (Rabbit; No reliable data available; >3980 mg/kg bodyweight; Rabbit)
ATE US (oral)	695 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h
1,4-dichlorobenzene (106-46-7)	
LD50 dermal rat	> 6000 mg/kg (Rat, Dermal)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Dermal)
LC50 inhalation rat (mg/l)	> 5 mg/l (4 h, Rat, Inhalation)
ATE US (oral)	500 mg/kg body weight
1,1-dichloroethane (75-34-3)	
LD50 oral rat	725 mg/kg (Rat, Literature study, Oral)
LD50 dermal rabbit	> 2348 mg/kg (Rabbit, Literature study, Dermal)
LC50 inhalation rat (mg/l)	54 mg/l (4 h, Rat, Literature study, Inhalation)
LC50 inhalation rat (ppm)	13000 ppm (4 h, Rat, Literature study, Inhalation)
ATE US (oral)	725 mg/kg body weight
ATE US (vapors)	54 mg/l/4h
ATE US (dust, mist)	54 mg/l/4h
1,2-dichloroethane (107-06-2)	
LD50 oral rat	770 mg/kg (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value, Oral)
LD50 dermal rabbit	2800 mg/kg (Rabbit, Literature study, Dermal)
LC50 inhalation rat (mg/l)	7.758 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours))
LC50 inhalation rat (ppm)	1886 ppm (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours))
ATE US (oral)	770 mg/kg body weight
ATE US (dermal)	2800 mg/kg body weight
ATE US (vapors)	7.758 mg/l/4h
ATE US (dust, mist)	7.758 mg/l/4h
1,1-dichloroethene (75-35-4)	
LD50 oral rat	> 1000 mg/kg (Rat, Male / female, Experimental value, Oral)
LC50 inhalation rat (mg/l)	34.1 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
cis-1,3-Dichloropropene (10061-01-5)	
ATE US (oral)	100 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
1,3-dichloropropene, trans- (10061-02-6)	
ATE US (oral)	100 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

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1,4-dioxane (123-91-1)	
LD50 oral rat	> 5000 mg/kg (Rat, Oral)
LD50 dermal rabbit	7600 mg/kg (Rabbit, Dermal)
LC50 inhalation rat (mg/l)	51 mg/l (4 h, Rat, Inhalation)
LC50 inhalation rat (ppm)	14250 ppm (4 h, Rat, Inhalation)
ATE US (dermal)	7600 mg/kg body weight
ATE US (vapors)	51 mg/l/4h
ATE US (dust, mist)	51 mg/l/4h
furan (110-00-9)	
LD50 oral rat	200 - 2000 mg/kg (Rat, Oral)
LC50 inhalation rat (mg/l)	9.6 mg/l (1 h, Rat, Male / female, Inconclusive, insufficient data, Inhalation (vapours))
ATE US (oral)	200 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	9.6 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
Methylene Chloride (75-09-2)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral)
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)
1,1,1,2-tetrachloroethane (79-34-5)	
LD50 oral rat	250 mg/kg (Rat, Literature study, Oral)
LD50 dermal rabbit	3990 mg/kg (Rabbit, Literature study, Dermal)
LC50 inhalation rat (mg/l)	8.6 mg/l (4 h, Rat, Literature study, Inhalation)
ATE US (oral)	250 mg/kg body weight
ATE US (dermal)	5 mg/kg body weight
ATE US (gases)	100 ppmV/4h
ATE US (vapors)	8.6 mg/l/4h
ATE US (dust, mist)	0.05 mg/l/4h
tetrachloroethylene (127-18-4)	
LD50 oral rat	> 2000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 3835 mg/kg bodyweight; Rat; Equivalent or similar to OECD 401; Experimental value; 3005 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 3000 mg/kg (Rabbit; Literature study; >10000 mg/kg bodyweight; Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	27.58 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	3786 ppm/4h (Rat; Experimental value)
ATE US (gases)	3786 ppmV/4h
ATE US (vapors)	27.58 mg/l/4h
ATE US (dust, mist)	27.58 mg/l/4h
1,1,2-trichloroethane (79-00-5)	
LD50 oral rat	837 mg/kg body weight (Rat, Male, Experimental value, Oral)
LD50 dermal rabbit	5380 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rabbit, Male, Experimental value, Dermal)
LC50 inhalation rat (mg/l)	9000 mg/m ³ air (OECD 403: Acute Inhalation Toxicity, 6 h, Rat, Male, Experimental value, Inhalation (vapours))
ATE US (oral)	837 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
trichloroethylene (79-01-6)	
LD50 oral rat	4920 mg/kg (Rat)
LD50 dermal rabbit	> 20000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	66 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	12000 ppm/4h (Rat)

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trichloroethylene (79-01-6)	
ATE US (oral)	4920 mg/kg body weight
ATE US (gases)	12000 ppmV/4h
ATE US (vapors)	66 mg/l/4h
ATE US (dust, mist)	66 mg/l/4h

trichloromonofluoromethane (75-69-4)	
LD50 oral rat	> 15000 mg/kg (Rat)
LC50 inhalation rat (mg/l)	150 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	26200 ppm/4h (Rat)
ATE US (gases)	26200 ppmV/4h
ATE US (vapors)	150 mg/l/4h
ATE US (dust, mist)	150 mg/l/4h

methanol (67-56-1)	
LD50 oral rat	> 5000 mg/kg (Rat; BASF test; Literature study; 1187-2769 mg/kg bodyweight; Rat; Weight of evidence)
LD50 dermal rabbit	15800 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (mg/l)	85 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	64000 ppm/4h (Rat; Literature study)
ATE US (oral)	100 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Suspected of causing genetic defects.
Carcinogenicity : May cause cancer.

carbon tetrachloride (56-23-5)	
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

chloroform (67-66-3)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

1,4-dichlorobenzene (106-46-7)	
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

1,2-dichloroethane (107-06-2)	
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

1,4-dioxane (123-91-1)	
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

furan (110-00-9)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

Methylene Chloride (75-09-2)	
IARC group	2A - Probably carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

1,1,2,2-tetrachloroethane (79-34-5)	
IARC group	2B - Possibly carcinogenic to humans

tetrachloroethylene (127-18-4)	
IARC group	2A - Probably carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

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trichloroethylene (79-01-6)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

Reproductive toxicity : Not classified
STOT-single exposure : Causes damage to organs.

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

allyl alcohol (107-18-6)	
LC50 fish 1	0.589 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Experimental value, GLP)
EC50 Daphnia 1	1.65 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, GLP)
ErC50 (algae)	5.38 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

allyl chloride (107-05-1)	
LC50 fish 1	0.32 mg/l (96 h, Pimephales promelas, Static system, Literature study, Nominal concentration)

carbon tetrachloride (56-23-5)	
LC50 fish 1	24.3 mg/l (OECD 203: Fish, Acute Toxicity Test, 4 day(s), Danio rerio, Flow-through system, Fresh water, Experimental value)
EC50 other aquatic organisms 1	180 mg/l (Plankton, Literature)
ErC50 (algae)	20 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)

chlorobenzene (108-90-7)	
LC50 fish 1	4.5 mg/l (EPA 660/3 - 75/009, 96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value)
EC50 Daphnia 1	26 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
LC50 fish 2	4.7 mg/l (LC50; 96 h)
EC50 Daphnia 2	0.59 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
ErC50 (algae)	11.4 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

chloroform (67-66-3)	
LC50 fish 1	18.2 ppm (LC50; ASTM; 96 h; Oncorhynchus mykiss; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 2	152.5 mg/l (EC50; US EPA; 48 h; Daphnia magna; Static system; Salt water; Experimental value)
ErC50 (algae)	13.3 mg/l (Other, 72 h, Chlamydomonas reinhardtii, Static system, Fresh water, Experimental value)

1,4-dichlorobenzene (106-46-7)	
LC50 fish 1	1.12 mg/l (96 h, Salmo gairdneri, Flow-through system)

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1,4-dichlorobenzene (106-46-7)	
EC50 Daphnia 1	0.7 mg/l (48 h, Daphnia magna, Measured concentration)
1,2-dichloroethane (107-06-2)	
LC50 fish 1	225 mg/l (96 h, Salmo gairdneri, Static system, Literature study)
EC50 Daphnia 1	155 - 220 mg/l (48 h, Daphnia magna, Static system, Literature study)
1,1-dichloroethene (75-35-4)	
LC50 fish 1	107.9 mg/l (Other, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	37 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 (algae)	410 mg/l (Other, 96 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
1,4-dioxane (123-91-1)	
LC50 fish 1	13000 mg/l (96 h, Pimephales promelas, GLP)
EC50 Daphnia 1	8450 mg/l (24 h, Daphnia magna)
furan (110-00-9)	
LC50 fish 1	61 mg/l (EPA method, Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Fresh water, Experimental value)
Methylene Chloride (75-09-2)	
LC50 fish 1	193 mg/l (96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	168.2 mg/l (48 h, Daphnia magna)
1,1,1,2-tetrachloroethane (79-34-5)	
LC50 fish 1	20.3 ppm (96 h, Pimephales promelas, Flow-through system, Literature study)
EC50 Daphnia 1	9.32 mg/l (48 h, Daphnia magna, Static system, Literature study)
tetrachloroethylene (127-18-4)	
EC50 Daphnia 1	8.5 mg/l (EC50; ASTM; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 2	3.64 mg/l (EC50; Other; 72 h; Chlamydomonas angulosa; Fresh water)
1,1,1,2-trichloroethane (79-00-5)	
LC50 fish 1	40 mg/l (EPA 660/3 - 75/009, 96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value, Nominal concentration)
ErC50 (algae)	200 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
trichloroethylene (79-01-6)	
LC50 fish 1	40.7 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 2	20.8 mg/l (EC50; 48 h)
trichloromonofluoromethane (75-69-4)	
LC50 fish 1	190 mg/l (LC50; 96 h; Salmo gairdneri)
EC50 Daphnia 1	130 mg/l (EC50; 48 h)
methanol (67-56-1)	
LC50 fish 1	15400 mg/l (LC50; EPA 660/3 - 75/009; 96 h; Lepomis macrochirus; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 1	> 10000 mg/l (EC50; DIN 38412-11; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
LC50 fish 2	10800 mg/l (LC50; 96 h; Salmo gairdneri)
12.2. Persistence and degradability	
Custom VOAs Standard 4	
Persistence and degradability	Not established.
allyl alcohol (107-18-6)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.66 g O ₂ /g substance
Chemical oxygen demand (COD)	2.12 g O ₂ /g substance

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allyl alcohol (107-18-6)	
ThOD	2.2 g O ₂ /g substance
BOD (% of ThOD)	0.75
allyl chloride (107-05-1)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.23 g O ₂ /g substance
Chemical oxygen demand (COD)	0.86 g O ₂ /g substance
ThOD	1.7 g O ₂ /g substance
BOD (% of ThOD)	0.14 (5 day(s), Calculated value)
carbon tetrachloride (56-23-5)	
Persistence and degradability	Readily biodegradable in water. Readily biodegradable in water in anaerobic conditions.
Biochemical oxygen demand (BOD)	0 g O ₂ /g substance
Chemical oxygen demand (COD)	0.001 g O ₂ /g substance
ThOD	0.21 g O ₂ /g substance
BOD (% of ThOD)	0
chlorobenzene (108-90-7)	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	0.03 g O ₂ /g substance
Chemical oxygen demand (COD)	0.41 g O ₂ /g substance
ThOD	2.06 g O ₂ /g substance
BOD (% of ThOD)	0.0145
chloroform (67-66-3)	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil. Low potential for adsorption in soil.
ThOD	0.33 - 1.35 g O ₂ /g substance
BOD (% of ThOD)	0.015 - 0.06
1,4-dichlorobenzene (106-46-7)	
Persistence and degradability	Non degradable in the soil. Readily biodegradable in water.
ThOD	1.52 g O ₂ /g substance
BOD (% of ThOD)	0.65 (Calculated value)
1,1-dichloroethane (75-34-3)	
Persistence and degradability	Not readily biodegradable in the soil. Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.002 g O ₂ /g substance
ThOD	0.81 - 0.97 g O ₂ /g substance
1,2-dichloroethane (107-06-2)	
Persistence and degradability	Not readily biodegradable in the soil. Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.0014 g O ₂ /g substance
Chemical oxygen demand (COD)	1.025 g O ₂ /g substance
ThOD	0.98 g O ₂ /g substance
BOD (% of ThOD)	0.001 (Calculated value)
1,1-dichloroethene (75-35-4)	
Persistence and degradability	Not readily biodegradable in water.
cis-1,3-Dichloropropene (10061-01-5)	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.
1,3-dichloropropene, trans- (10061-02-6)	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.

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1,4-dioxane (123-91-1)	
Persistence and degradability	Non degradable in the soil. Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0 g O ₂ /g substance
ThOD	1.8 g O ₂ /g substance
BOD (% of ThOD)	0
furan (110-00-9)	
Persistence and degradability	Not readily biodegradable in water.
ThOD	2.1 g O ₂ /g substance
Methylene Chloride (75-09-2)	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.
1,1,2,2-tetrachloroethane (79-34-5)	
Persistence and degradability	Non degradable in the soil. Not readily biodegradable in water.
tetrachloroethylene (127-18-4)	
Persistence and degradability	Not readily biodegradable in water. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	0.06 g O ₂ /g substance
ThOD	0.39 g O ₂ /g substance
BOD (% of ThOD)	0.15
1,1,2-trichloroethane (79-00-5)	
Persistence and degradability	Non degradable in the soil. Not readily biodegradable in water.
trichloroethylene (79-01-6)	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil. Biodegradable in the soil under anaerobic conditions.
trichloromonofluoromethane (75-69-4)	
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0 g O ₂ /g substance
BOD (% of ThOD)	0
methanol (67-56-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.6 - 1.12 g O ₂ /g substance
Chemical oxygen demand (COD)	1.42 g O ₂ /g substance
ThOD	1.5 g O ₂ /g substance
BOD (% of ThOD)	0.8 (Literature study)
12.3. Bioaccumulative potential	
Custom VOAs Standard 4	
Bioaccumulative potential	Not established.
allyl alcohol (107-18-6)	
BCF fish 1	0.8 (Pisces)
Log Pow	0.17 (Weight of evidence approach, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
allyl chloride (107-05-1)	
BCF fish 1	< 5.6 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, Fresh weight)
Log Pow	2.1 (Experimental value, Equivalent or similar to OECD 117, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
carbon tetrachloride (56-23-5)	
BCF fish 1	30 (Equivalent or similar to OECD 305, 21 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Fresh weight)
Log Pow	2.75 - 2.83 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

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chlorobenzene (108-90-7)	
BCF fish 1	447 (BCF)
BCF fish 2	3.9 - 40 (BCF)
Log Pow	2.8 - 2.98
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
chloroform (67-66-3)	
BCF fish 1	4.1 - 13 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value)
BCF fish 2	1.4 - 4.7 (BCF; OECD 305: Bioconcentration: Flow-Through Fish Test; 42 days; Cyprinus carpio; Flow-through system; Fresh water; Experimental value)
Log Pow	1.97 (Experimental value; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
1,4-dichlorobenzene (106-46-7)	
BCF fish 1	214 - 720 (Salmo gairdneri, Chronic)
Log Pow	3.39 - 3.62 (Experimental value)
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).
1,1-dichloroethane (75-34-3)	
BCF fish 1	1.2 (109 h, Pisces, Literature study)
Log Pow	1.79 - 1.99 (Literature study)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
1,2-dichloroethane (107-06-2)	
BCF fish 1	2 (336 h, Lepomis macrochirus)
Log Pow	1.45 - 1.48 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
1,1-dichloroethene (75-35-4)	
BCF fish 1	2.5 - 13 (6 week(s), Cyprinus carpio, Experimental value)
Log Pow	2.13 (Weight of evidence approach, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
cis-1,3-Dichloropropene (10061-01-5)	
Log Pow	2.06
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
1,3-dichloropropene, trans- (10061-02-6)	
Log Pow	2
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
1,4-dioxane (123-91-1)	
BCF fish 1	0.2 - 0.7 (Cyprinus carpio, Test duration: 6 weeks)
Log Pow	-0.27 (Experimental value)
Bioaccumulative potential	Not bioaccumulative.
furan (110-00-9)	
BCF fish 1	0.9 - 13 (Cyprinus carpio, Experimental value, Test duration: 6 weeks)
Log Pow	1.36 (QSAR, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
Methylene Chloride (75-09-2)	
BCF fish 1	2 - 40 (OECD 305: Bioconcentration: Flow-Through Fish Test, 6 week(s), Cyprinus carpio, Semi-static system, Fresh water, Experimental value, GLP)
Log Pow	1.25 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
1,1,2,2-tetrachloroethane (79-34-5)	
BCF fish 1	4.1 - 13.2 (Cyprinus carpio, Literature study, Chronic)
Log Pow	2.39 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

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tetrachloroethylene (127-18-4)	
BCF fish 2	25.8 - 77.1 (BCF; 8 weeks)
Log Pow	3.4 (Experimental value; 2.53; Experimental value; Equivalent or similar to OECD 107; 23 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
1,1,2-trichloroethane (79-00-5)	
BCF fish 1	0.7 - 6.7 (OECD 305: Bioconcentration: Flow-Through Fish Test, 6 week(s), Cyprinus carpio, Flow-through system, Experimental value, Fresh weight)
Log Pow	1.89 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
trichloroethylene (79-01-6)	
BCF fish 1	17 (BCF; 336 h)
BCF fish 2	90 (BCF; 72 h; Leuciscus idus)
BCF other aquatic organisms 1	3440 (BCF; 120 h)
BCF other aquatic organisms 2	4270 (BCF; 120 h)
Log Pow	2.29 - 2.42 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
trichloromonofluoromethane (75-69-4)	
BCF fish 1	4.5 (BCF)
BCF fish 2	5 (BCF)
BCF other aquatic organisms 1	1.4 (BCF)
BCF other aquatic organisms 2	4.4 (BCF)
Log Pow	2.3 - 2.53
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
methanol (67-56-1)	
BCF fish 1	< 10 (BCF; 72 h; Leuciscus idus)
Log Pow	-0.77 (Experimental value; Other)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

allyl alcohol (107-18-6)	
Surface tension	73.1 mN/m (20 °C, 1 g/l, EU Method A.5: Surface tension)
Log Koc	0.608 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Highly mobile in soil. Toxic to flora.
allyl chloride (107-05-1)	
Log Koc	1.67 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.
carbon tetrachloride (56-23-5)	
Surface tension	0.027 N/m (20 °C)
Log Koc	1.69 (log Koc, EPA OTS 796.2750: Sediment and Soil Adsorption Isotherm, Experimental value)
Ecology - soil	Highly mobile in soil. May be harmful to plant growth, blooming and fruit formation. Soil contaminant.
chlorobenzene (108-90-7)	
Surface tension	0.033 N/m (25 °C)
Log Koc	Koc,PCKOCWIN v1.66; 268; Calculated value; log Koc; PCKOCWIN v1.66; 2.42; Calculated value
Ecology - soil	Low potential for adsorption in soil.
chloroform (67-66-3)	
Surface tension	0.0271 N/m (20 °C)
Log Koc	Koc,Other; 86.7-367; Experimental value; log Koc; Other; 1.94-2.56; Experimental value
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.
1,4-dichlorobenzene (106-46-7)	
Surface tension	0.03 N/m (55 °C)
Ecology - soil	Adsorbs into the soil.

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1,1-dichloroethane (75-34-3)	
Surface tension	0.025 N/m
Ecology - soil	No (test)data on mobility of the substance available.
1,2-dichloroethane (107-06-2)	
Surface tension	0.032 N/m (20 °C)
Log Koc	1.52 (log Koc)
Ecology - soil	Highly mobile in soil.
1,1-dichloroethene (75-35-4)	
Log Koc	1.503 - 1.848 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Highly mobile in soil.
1,4-dioxane (123-91-1)	
Surface tension	0.037 N/m (20 °C)
furan (110-00-9)	
Ecology - soil	No (test)data on mobility of the substance available.
Methylene Chloride (75-09-2)	
Surface tension	0.028 N/m (20 °C)
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.
1,1,1,2-tetrachloroethane (79-34-5)	
Surface tension	0.035 N/m (20 °C)
Ecology - soil	No (test)data on mobility of the substance available.
tetrachloroethylene (127-18-4)	
Surface tension	0.0313 N/m (20 °C)
Log Koc	Koc,141; Experimental value; log Koc; 2.15; Experimental value
1,1,1,2-trichloroethane (79-00-5)	
Log Koc	1.64 - 1.783 (log Koc, SRC PCKOCWIN v2.0, Estimated value)
Ecology - soil	Highly mobile in soil.
trichloroethylene (79-01-6)	
Surface tension	0.03 N/m
trichloromonofluoromethane (75-69-4)	
Surface tension	0.019 N/m (25 °C)
methanol (67-56-1)	
Surface tension	0.023 N/m (20 °C)
Log Koc	Koc,PCKOCWIN v1.66; 1; Calculated value

12.5. Other adverse effects

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allyl alcohol (107-18-6)	
allyl chloride (107-05-1)	
carbon tetrachloride (56-23-5)	
chlorobenzene (108-90-7)	
chloroform (67-66-3)	
1,4-dichlorobenzene (106-46-7)	

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1,1-dichloroethane (75-34-3)	
1,2-dichloroethane (107-06-2)	
1,1-dichloroethene (75-35-4)	
cis-1,3-Dichloropropene (10061-01-5)	
1,3-dichloropropene, trans- (10061-02-6)	
1,4-dioxane (123-91-1)	
furan (110-00-9)	
Methylene Chloride (75-09-2)	
1,1,2,2-tetrachloroethane (79-34-5)	
tetrachloroethylene (127-18-4)	
1,1,2-trichloroethane (79-00-5)	
trichloroethylene (79-01-6)	
trichloromonofluoromethane (75-69-4)	
methanol (67-56-1)	

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1230 Methanol (methanol ; allyl alcohol ; allyl chloride ; carbon tetrachloride ; chlorobenzene ; chloroform ; 1,4-dichlorobenzene ; 1,1-dichloroethane ; 1,2-dichloroethane ; 1,3-dichloropropene, (Z)- ; 1,3-dichloropropene, trans- ; furan ; 1,1,2,2-tetrachloroethane ; 1,1,2-trichloroethane ; trichloroethylene), 3 (6.1), II

UN-No.(DOT) : UN1230

Proper Shipping Name (DOT) : Methanol
methanol ; allyl alcohol ; allyl chloride ; carbon tetrachloride ; chlorobenzene ; chloroform ; 1,4-dichlorobenzene ; 1,1-dichloroethane ; 1,2-dichloroethane ; 1,3-dichloropropene, (Z)- ; 1,3-dichloropropene, trans- ; furan ; 1,1,2,2-tetrachloroethane ; 1,1,2-trichloroethane ; trichloroethylene

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120



Packing group (DOT) : II - Medium Danger

Subsidiary risk (DOT) : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132

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Hazard labels (DOT)	: 3 - Flammable liquid 6.1 - Poison
	 
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Symbols	: + - Fixes (cannot be altered) proper shipping name, hazard class, and packing group, I - Proper shipping name appropriate for international and domestic transportation
DOT Special Provisions (49 CFR 172.102)	: IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
DOT Vessel Stowage Other	: 40 - Stow "clear of living quarters"
Emergency Response Guide (ERG) Number	: 131
Other information	: No supplementary information available.

Transportation of Dangerous Goods

Not applicable

Transport by sea

Transport document description (IMDG)	: UN 1230 METHANOL (methanol ; allyl alcohol ; allyl chloride ; carbon tetrachloride ; chlorobenzene ; chloroform ; 1,4-dichlorobenzene ; 1,1-dichloroethane ; 1,2-dichloroethane ; 1,3-dichloropropene, (Z)- ; 1,3-dichloropropene, trans- ; furan ; 1,1,2,2-tetrachloroethane ; 1,1,2-trichloroethane ; trichloroethylene), 3 (6.1), II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS (12°C c.c.)
UN-No. (IMDG)	: 1230
Proper Shipping Name (IMDG)	: METHANOL
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: II - substances presenting medium danger
Subsidiary risks (IMDG)	: 6.1 - Toxic substances
Limited quantities (IMDG)	: 1 L

Air transport

Transport document description (IATA)	: UN 1230 Methanol (methanol ; allyl alcohol ; allyl chloride ; carbon tetrachloride ; chlorobenzene ; chloroform ; 1,4-dichlorobenzene ; 1,1-dichloroethane ; 1,2-dichloroethane ; 1,3-dichloropropene, (Z)- ; 1,3-dichloropropene, trans- ; furan ; 1,1,2,2-tetrachloroethane ; 1,1,2-trichloroethane ; trichloroethylene), 3 (6.1), II, ENVIRONMENTALLY HAZARDOUS
UN-No. (IATA)	: 1230
Proper Shipping Name (IATA)	: Methanol

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Class (IATA)	: 3 - Flammable Liquids
Packing group (IATA)	: II - Medium Danger
Subsidiary hazards (IATA)	: 6.1 - Toxic substances

SECTION 15: Regulatory information

15.1. US Federal regulations

allyl alcohol (107-18-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb
allyl chloride (107-05-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	1000 lb
carbon tetrachloride (56-23-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	10 lb
chlorobenzene (108-90-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
chloroform (67-66-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	10 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	10 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	10000 lb
1,4-dichlorobenzene (106-46-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
1,1-dichloroethane (75-34-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	1000 lb

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1,2-dichloroethane (107-06-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb
1,1-dichloroethene (75-35-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb
cis-1,3-Dichloropropene (10061-01-5)	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
1,3-dichloropropene, trans- (10061-02-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
EPA TSCA Regulatory Flag	PMN - PMN - indicates a commenced PMN substance.
1,4-dioxane (123-91-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb
furan (110-00-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb
Methylene Chloride (75-09-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
EPA TSCA Regulatory Flag	R - R - indicates a substance that is the subject of a TSCA section 6 risk management rule.
CERCLA RQ	1000 lb
1,1,2,2-tetrachloroethane (79-34-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb
tetrachloroethylene (127-18-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb
1,1,2-trichloroethane (79-00-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb

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trichloroethylene (79-01-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
EPA TSCA Regulatory Flag	R - R - indicates a substance that is the subject of a TSCA section 6 risk management rule.
CERCLA RQ	100 lb
trichloromonofluoromethane (75-69-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
methanol (67-56-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	5000 lb

15.2. International regulations

CANADA

allyl alcohol (107-18-6)	
Listed on the Canadian DSL (Domestic Substances List)	
allyl chloride (107-05-1)	
Listed on the Canadian DSL (Domestic Substances List)	
carbon tetrachloride (56-23-5)	
Listed on the Canadian DSL (Domestic Substances List)	
chlorobenzene (108-90-7)	
Listed on the Canadian DSL (Domestic Substances List)	
chloroform (67-66-3)	
Listed on the Canadian DSL (Domestic Substances List)	
1,4-dichlorobenzene (106-46-7)	
Listed on the Canadian DSL (Domestic Substances List)	
1,1-dichloroethane (75-34-3)	
Listed on the Canadian NDSL (Non-Domestic Substances List)	
1,2-dichloroethane (107-06-2)	
Listed on the Canadian DSL (Domestic Substances List)	
1,1-dichloroethene (75-35-4)	
Listed on the Canadian DSL (Domestic Substances List)	
cis-1,3-Dichloropropene (10061-01-5)	
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)	
1,3-dichloropropene, trans- (10061-02-6)	
Listed on the Canadian NDSL (Non-Domestic Substances List)	
1,4-dioxane (123-91-1)	
Listed on the Canadian DSL (Domestic Substances List)	
furan (110-00-9)	
Listed on the Canadian DSL (Domestic Substances List)	
Methylene Chloride (75-09-2)	
Listed on the Canadian DSL (Domestic Substances List)	
1,1,1,2-tetrachloroethane (79-34-5)	
Listed on the Canadian DSL (Domestic Substances List)	
tetrachloroethylene (127-18-4)	
Listed on the Canadian DSL (Domestic Substances List)	

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1,1,2-trichloroethane (79-00-5)

Listed on the Canadian DSL (Domestic Substances List)

trichloroethylene (79-01-6)

Listed on the Canadian DSL (Domestic Substances List)

trichloromonofluoromethane (75-69-4)

Listed on the Canadian DSL (Domestic Substances List)

methanol (67-56-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

allyl chloride (107-05-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

carbon tetrachloride (56-23-5)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on EPA Hazardous Air Pollutant (HAPS)

chlorobenzene (108-90-7)

Listed on EPA Hazardous Air Pollutant (HAPS)

chloroform (67-66-3)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on EPA Hazardous Air Pollutant (HAPS)

1,4-dichlorobenzene (106-46-7)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on EPA Hazardous Air Pollutant (HAPS)

1,1-dichloroethane (75-34-3)

Listed on EPA Hazardous Air Pollutant (HAPS)

1,2-dichloroethane (107-06-2)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on EPA Hazardous Air Pollutant (HAPS)

1,1-dichloroethene (75-35-4)

Listed on IARC (International Agency for Research on Cancer)
Listed on EPA Hazardous Air Pollutant (HAPS)

1,4-dioxane (123-91-1)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on EPA Hazardous Air Pollutant (HAPS)

furan (110-00-9)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)

Methylene Chloride (75-09-2)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on EPA Hazardous Air Pollutant (HAPS)

1,1,1,2-tetrachloroethane (79-34-5)

Listed on IARC (International Agency for Research on Cancer)
Listed on EPA Hazardous Air Pollutant (HAPS)

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tetrachloroethylene (127-18-4)
Listed on IARC (International Agency for Research on Cancer) Listed as carcinogen on NTP (National Toxicology Program) Listed on EPA Hazardous Air Pollutant (HAPS)
1,1,2-trichloroethane (79-00-5)
Listed on EPA Hazardous Air Pollutant (HAPS)
trichloroethylene (79-01-6)
Listed on IARC (International Agency for Research on Cancer) Listed as carcinogen on NTP (National Toxicology Program) Listed on EPA Hazardous Air Pollutant (HAPS)
methanol (67-56-1)
Listed on EPA Hazardous Air Pollutant (HAPS)

15.3. US State regulations

carbon tetrachloride (56-23-5)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	5 µg/day	
chloroform (67-66-3)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	Yes	No	No	20 µg/day	
1,4-dichlorobenzene (106-46-7)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	20 µg/day	
1,1-dichloroethane (75-34-3)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	100 µg/day	
1,2-dichloroethane (107-06-2)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	10 µg/day	
1,1-dichloroethene (75-35-4)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

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1,4-dioxane (123-91-1)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	30 µg/day	
furan (110-00-9)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		
Methylene Chloride (75-09-2)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	50 µg/day	
1,1,2,2-tetrachloroethane (79-34-5)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	3 µg/day	
tetrachloroethylene (127-18-4)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	14 µg/day	
1,1,2-trichloroethane (79-00-5)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	10 µg/day	
trichloroethylene (79-01-6)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	Yes	No	Yes	14 µg/day	
methanol (67-56-1)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
No	Yes	No	No		47000 µg/day (inhalation); 23,000 µg/day (oral)

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SECTION 16: Other information

Revision date : 10/11/2019
Other information : None.

Full text of H-phrases:

H224	Extremely flammable liquid and vapour
H301	Toxic if swallowed
H310	Fatal in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H341	Suspected of causing genetic defects
H350	May cause cancer
H370	Causes damage to organs
H372	Causes damage to organs through prolonged or repeated exposure
H420	Harms public health and the environment by destroying ozone in the upper atmosphere

Phenova US SDS REV

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