

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 09/30/2019 Revision date: 09/30/2019 Version: 1.0

## **SECTION 1: Identification**

1.1. Identification

Product form : Mixture

Product name : Custom VOC Standard

Product code : AL0-130849

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 H225 Highly flammable liquid and vapour

Category 2

Acute toxicity (oral) H301 Toxic if swallowed

Category 3

Acute toxicity (dermal) H311 Toxic in contact with skin

Category 3

Carcinogenicity Category 2 H351 Suspected of causing cancer Specific target organ H370 Causes damage to organs

toxicity (single exposure)

Category 1

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) : H225 - Highly flammable liquid and vapour

H301+H311 - Toxic if swallowed or in contact with skin

H351 - Suspected of causing cancer H370 - Causes damage to organs

Precautionary statements (GHS US) : 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. P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 - If swallowed: Immediately call a poison center or doctor

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower

P308+P313 - If exposed or concerned: Get medical advice/attention.

P361+P364 - Take off immediately all contaminated clothing and wash it 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

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accordance with local, regional, national and/or international regulation

#### 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	98.412
bis(2-chloroethyl) ether (Component)	(CAS-No.) 111-44-4	0.1
4-Methyl-2-Pentanone (Component)	(CAS-No.) 108-10-1	0.1

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. Call a POISON CENTER or

doctor/physician. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Immediately call a poison center or doctor/physician. Wash with plenty of soap and water.

Wash contaminated clothing before reuse.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Immediately call a

poison center or doctor/physician.

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

Potential Adverse human health effects and

symptoms

: Toxic if swallowed. Toxic in contact with skin.

Symptoms/effects after inhalation

: May cause cancer by inhalation.

Symptoms/effects after skin contact

: Repeated exposure to this material can result in absorption through skin causing significant

health hazard. Toxic in contact with skin.

Symptoms/effects after ingestion

Toxic if swallowed. Swallowing a small quantity of this material will result in serious health

hazard.

### 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 : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use a heavy water stream.

## 5.2. Specific hazards arising from the chemical

Fire hazard : Extremely flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapor-air mixture.

## 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.

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#### **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. Avoid breathing dust/fume/gas/mist/vapors/spray.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up in absorbent material. Collect spillage.

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

Additional hazards when processed

: Handle empty containers with care because residual vapors are flammable.

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. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do

SO.

Hygiene measures

Do not eat, drink or smoke when using this product. Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before

**ACGIH 2018** 

260 mg/m<sup>3</sup>

reuse.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Keep in fireproof place. Keep container tightly closed. Keep container tightly closed and in a

well-ventilated place. Keep away from any flames or sparking source.

Incompatible materials : Direct sunlight. Heat sources.

Regulatory reference

OSHA PEL (TWA) (mg/m³)

### SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**ACGIH** 

**OSHA** 

Custom VOC Standard				
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/m³)	260 mg/m³		
OSHA	OSHA PEL (TWA) (ppm)	200 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		

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	, , , , , , , , , , , , , , , , , , , ,			
methanol (67-56-1	)			
OSHA	OSHA PEL (TWA) (ppm)	200 ppm		
OSHA	Regulatory reference (US-OSHA)	OSHA		
bis(2-chloroethyl) ether (111-44-4)				
ACGIH	Local name	Dichloroethyl ether		
ACGIH	ACGIH TWA (ppm)	5 ppm		
ACGIH	ACGIH STEL (ppm)	10 ppm		
ACGIH	Remark (ACGIH)	URT & eye irr; nausea		
ACGIH	Regulatory reference	ACGIH 2018		
OSHA	OSHA PEL (Ceiling) (mg/m³)	90 mg/m³		
OSHA	OSHA PEL (Ceiling) (ppm)	15 ppm		
OSHA	Regulatory reference (US-OSHA)	OSHA		
4-Methyl-2-Pentan	one (108-10-1)			
ACGIH	Local name	Methyl isobutyl ketone		
ACGIH	ACGIH TWA (ppm)	20 ppm (Methyl isobutyl ketone; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)		
ACGIH	ACGIH STEL (ppm)	75 ppm (Methyl isobutyl ketone; USA; Short time value; TLV - Adopted Value)		
ACGIH	Remark (ACGIH)	URT irr; dizziness; headache		
ACGIH	Regulatory reference	ACGIH 2018		
OSHA	OSHA PEL (TWA) (mg/m³)	410 mg/m³		
OSHA	OSHA PEL (TWA) (ppm)	100 ppm		
OSHA	Regulatory reference (US-OSHA)	OSHA		

## 8.2. Appropriate engineering controls

Appropriate engineering controls

: Either local exhaust or general room ventilation is usually required.

#### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.

#### Hand protection:

Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration

#### Eye protection:

Chemical goggles or safety glasses. Safety glasses

#### Skin and body protection:

Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact

#### Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

## Personal protective equipment symbol(s):







## Other information:

Do not eat, drink or smoke during use.

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#### 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
Flash point : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Flammability (solid, gas) : Extremely flammable liquid and vapour.

Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : No data available : No data available Solubility Log Pow : No data available : No data available Auto-ignition temperature Decomposition temperature : No data available Viscosity, kinematic : No data available No data available Viscosity, dynamic **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

Extremely flammable liquid and vapour. May form flammable/explosive vapor-air mixture.

## 10.3. Possibility of hazardous reactions

Not established.

## 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Sparks. Heat. Overheating. Open flame.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

May release flammable gases.

### **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Custom VOC Standard	
ATE US (oral)	101.614 mg/kg body weight
ATE US (dermal)	304.841 mg/kg body weight
modbanal (C7 FC 4)	
methanol (67-56-1)	

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methanol (67-56-1)			
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		
bis(2-chloroethyl) ether (111-44-4)			
LD50 oral rat	75 mg/kg body weight (Rat, Male, Experimental value, Oral, 14 day(s))		
LD50 dermal rabbit	9 mg/kg body weight (24 h, Rabbit, Experimental value, Dermal)		
LC50 inhalation rat (mg/l)	0.33 mg/l (4 h, Rat, Experimental value, Inhalation (mist))		
ATE US (oral)	5 mg/kg body weight		
ATE US (dermal)	9 mg/kg body weight		
ATE US (definal)	100 ppmV/4h		
ATE US (gases) ATE US (vapors)	0.33 mg/l/4h		
ATE US (vapors)  ATE US (dust, mist)	0.33 mg/l/4h		
	0.55 Hig/#4H		
4-Methyl-2-Pentanone (108-10-1) LD50 oral rat	2000 marilion (Data Familian tana similar ta OFOD 404 Familian tanà si		
	2080 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value)		
LD50 dermal rat	>= 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)		
LD50 dermal rabbit	> 16000 mg/kg (Rabbit)		
LC50 inhalation rat (mg/l)	8.2- 16.4,Rat; Experimental value		
LC50 inhalation rat (ppm)	2000 - 4000 ppm/4h (Rat; Experimental value)		
ATE US (oral)	2080 mg/kg body weight		
ATE US (gases)	2000 ppmV/4h		
ATE US (vapors)	11 mg/l/4h		
ATE US (dust, mist)	1.5 mg/l/4h		
Skin corrosion/irritation	: Not classified		
Serious eye damage/irritation	: Not classified		
Respiratory or skin sensitization	: Not classified		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: Suspected of causing cancer.		
his/O shlavashkul) shlava(444,44,4)			
bis(2-chloroethyl) ether (111-44-4) IARC group	3 - Not classifiable		
<u> </u>	5 - Not diassiliable		
4-Methyl-2-Pentanone (108-10-1)	2P. Desaibly carainagenia to humana		
IARC group	2B - Possibly carcinogenic to humans		
Reproductive toxicity	: Not classified		
	Based on available data, the classification criteria are not met		
STOT-single exposure	: Causes damage to organs.		
STOT-repeated exposure	: Not classified		
Aspiration hazard	: Not classified		
Potential Adverse human health effects and symptoms	: Toxic if swallowed. Toxic in contact with skin.		
Symptoms/effects after inhalation	: May cause cancer by inhalation.		
Symptoms/effects after skin contact	<ul> <li>Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin.</li> </ul>		
Symptoms/effects after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.		

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SECTION 12: Ecological informat	ion		
12.1. Toxicity			
Ecology - water	: Harmful to aquatic life with long lasting effects.		
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)		
bis(2-chloroethyl) ether (111-44-4)			
LC50 fish 1	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Experimental value, GLP)		
EC50 Daphnia 1	414 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi- static system, Fresh water, Experimental value, GLP)		
ErC50 (algae)	> 79.44 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata,		
	Static system, Fresh water, Experimental value, GLP)		
4-Methyl-2-Pentanone (108-10-1)			
LC50 fish 1	600 mg/l (96 h, Salmo gairdneri, Fresh water, Literature study)		
EC50 Daphnia 1	> 200 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)		
LC50 fish 2	> 179 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)		
12.2. Persistence and degradability			
Custom VOC Standard			
Persistence and degradability	May cause long-term adverse effects in the environment.		
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 O₂/g substance		
Chemical oxygen demand (COD)	1.42 g O₂/g substance		
ThOD	1.5 g O₂/g substance		
BOD (% of ThOD)	0.8 (Literature study)		
bis(2-chloroethyl) ether (111-44-4)			
Persistence and degradability	Not readily biodegradable in water.		
4-Methyl-2-Pentanone (108-10-1)	Therroadily broadgradus in nation		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Low potential for adsorption in soil. Photolysis in the air.		
Biochemical oxygen demand (BOD)	2.06 g O₂/g substance		
Chemical oxygen demand (COD)	2.16 g O <sub>2</sub> /g substance		
ThOD	2.72 g O₂/g substance		
BOD (% of ThOD)	0.76		
12.3. Bioaccumulative potential			
Custom VOC Standard			
Bioaccumulative potential	Not established.		
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).		
bis(2-chloroethyl) ether (111-44-4)			
BCF fish 1	11 l/kg (Equivalent or similar to OECD 305, 14 day(s), Lepomis macrochirus, Semi-static system, Fresh water, Experimental value)		
Log Pow	1.12 (Experimental value, Equivalent or similar to OECD 107, 20 °C)		
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).		
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4-Methyl-2-Pentanone (108-10-1)	
BCF fish 1	2 - 5 (BCF)
Log Pow	1.9 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

#### 12.4. Mobility in soil

methanol (67-56-1)			
Surface tension	0.023 N/m (20 °C)		
Log Koc	Koc,PCKOCWIN v1.66; 1; Calculated value		
bis(2-chloroethyl) ether (111-44-4)			
Surface tension	0.038 N/m (19 °C)		
Log Koc	1.88 (log Koc, Experimental value)		
Ecology - soil	Highly mobile in soil.		
4-Methyl-2-Pentanone (108-10-1)			
Surface tension	0.024 N/m (20 °C)		
Log Koc	Koc,101.85; Weight of evidence; Calculated value; log Koc; 2.008; Weight of evidence; Calculated value		
Ecology - soil	Low potential for adsorption in soil.		

#### 12.5. Other adverse effects

Custom VOC Standard		
methanol (67-56-1)		
bis(2-chloroethyl) ether (111-44-4)		
4-Methyl-2-Pentanone (108-10-1)		

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.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

## **SECTION 14: Transport information**

#### Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1992 Flammable liquids, toxic, n.o.s. (methanol; bis(2-chloroethyl) ether; methyl isobutyl

ketone), 3 (6.1), II

UN-No.(DOT) : UN1992

Proper Shipping Name (DOT) : Flammable liquids, toxic, n.o.s.

methanol; bis(2-chloroethyl) ether; methyl isobutyl ketone

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) : 243

DOT Symbols : G - Identifies PSN requiring a technical name

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.

TP13 - Self-contained breathing apparatus must be provided when this hazardous material is

transported by sea.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150 DOT Quantity Limitations Passenger aircraft/rail : 1 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

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 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (methanol; bis(2-chloroethyl) ether; methyl

isobutyl ketone), 3 (6.1), II

UN-No. (IMDG) : 1992

Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, TOXIC, N.O.S.

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : II - substances presenting medium danger

Subsidiary risks (IMDG) : 6.1 - Toxic substances

Air transport

Transport document description (IATA) : UN 1992 Flammable liquid, toxic, n.o.s. (methanol; bis(2-chloroethyl) ether; methyl isobutyl

ketone), 3 (6.1), II

UN-No. (IATA) : 199

Proper Shipping Name (IATA) : Flammable liquid, toxic, n.o.s.

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

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## **SECTION 15: Regulatory information**

15.1. US Federal regulations

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		
bis(2-chloroethyl) ether (111-44-4)			
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)			
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a final TSCA section 4 test rule.		
CERCLA RQ 10 lb			
RQ (Reportable quantity, section 304 of EPA's List of Lists)	10 lb		
SARA Section 302 Threshold Planning 10000 lb			

### 4-Methyl-2-Pentanone (108-10-1)

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**

#### methanol (67-56-1)

Quantity (TPQ)

Listed on the Canadian DSL (Domestic Substances List)

## bis(2-chloroethyl) ether (111-44-4)

Listed on the Canadian DSL (Domestic Substances List)

#### 4-Methyl-2-Pentanone (108-10-1)

Listed on the Canadian DSL (Domestic Substances List)

### **EU-Regulations**

No additional information available

## **National regulations**

#### methanol (67-56-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

### bis(2-chloroethyl) ether (111-44-4)

Listed on EPA Hazardous Air Pollutant (HAPS)

#### 4-Methyl-2-Pentanone (108-10-1)

Listed on IARC (International Agency for Research on Cancer)

Listed on EPA Hazardous Air Pollutant (HAPS)

### 15.3. US State regulations

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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## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

bis(2-chloroethyl) ether (111-44-4)					
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	0.3 μg/day	
4-Methyl-2-Pentanone (108-10-1)					
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	Yes	No	No		

### **SECTION 16: Other information**

Revision date : 09/30/2019

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE

COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending

Regulation (EC) No 1907/2006.

Other information : None.

Full text of H-phrases:

H225	Highly flammable liquid and vapour
H301	Toxic if swallowed
H311	Toxic in contact with skin
H351	Suspected of causing cancer
H370	Causes damage to organs

#### Phenova US SDS REV

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