

# **Safety Data Sheet**

# Methylene Chloride ACS

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Methylene Chloride ACS

Synonyms/Generic Names: Dichloromethane

**Product Number: 3595** 

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc.

N4335 Temkin Rd. Columbus, WI. 53925

For More Information Call: 920-623-2140 (Monday-Friday 8:00-4:30)

www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

#### 2. HAZARDS IDENTIFICATION

Hazards Not Otherwise Classified (HNOC): Exposure in an enclosed or poorly ventilated area may be harmful

Specific Target Organs Toxicity (STOT): Liver, Pancreas, Blood, Central nervous system, Heart, Kidney,

Signal Words: Warning

**Pictograms:** 





#### **GHS Classification:**

Skin irritation	Category 2
Eye irritation	Category 2B
Carcinogenicity	Category 2
Specific target organ toxicity-repeated exposure	Category 2
Specific target organ toxicity-single exposure (Respiratory tract irritation, Narcotic effects)	Category 3

#### **GHS Label Elements, including precautionary statements:**

#### **Hazard Statements:**

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H315	Causes skin irritation.	
H320	Causes eye irritation.	
H335	May cause respiratory irritation.	
H336	May cause drowsiness or dizziness.	
H351	Suspected of causing cancer.	

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H373	Cause damage to organs through prolonged or repeated exposure.
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## **Precautionary Statements:**

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, protective clothing, eye, and face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest
	in a position comfortable for breathing.
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.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P332+P337+P313	If skin or eye irritation occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P403+P233+P405	Store in a well-ventilated place. Keep container tightly closed. Store locked
	up.
P501	Dispose of contents/container in accordance with local regulations.

#### **Potential Health Effects**

Eyes	Causes eye irritation.	
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness.	
Skin Harmful if absorbed through skin. Causes skin irritation.		
Ingestion Harmful if swallowed.		

## NFPA Ratings

Health	2
Flammability	1
Reactivity	0
Specific hazard	Not Available

## **HMIS Ratings**

Health	2
Fire	1
Reactivity	0

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS#	EINECS# / ELINCS#	Formula	Molecular Weight
Methylene Chloride	99.97 – 100	75-09-2	200-838-9	CH <sub>2</sub> Cl <sub>2</sub>	84.93 g/mol
Propylene oxide	Proprietary	75-56-9	200-879-2	C <sub>3</sub> H <sub>6</sub> O	58.08 g/mol

# 4. FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention if you feel	
	unwell.	
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not	
	breathing, give artificial respiration. Get medical attention if you feel unwell.	
Skin	Flush with plenty of water for at least 15 minutes while removing contaminated clothing	
	and wash using soap. Get medical attention if you feel unwell.	
Ingestion	<b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If	
_	conscious, wash out mouth with water. Get medical attention if you feel unwell.	

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General Advice	Get medical advice / attention if you feel unwell. Show this safety data sheet to the
	doctor.

#### 5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Product may be flammable at high temperatures. Use water spray, alcohol-resistant foam, dry chemicals or carbon dioxide to extinguish fire. Use appropriate media for adjacent fire. Cool containers with water.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical	Emits toxic fumes (carbon oxides, hydrogen chloride gas, chlorine, phosgene) under fire conditions. (See also Stability and Reactivity section).

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Do not get in eyes, on skin or on clothing. Do not breathe vapors, mist, or spray. Ventilate closed spaces before entering. Exposure in an enclosed or poorly ventilated area may be very harmful. Keep unnecessary people away, isolate hazard area and deny entry. Evacuation of surrounding area may be necessary for large spills. Wear appropriate personal protective equipment recommended in Section 8 of the SDS.	
Environmental precautions	Prevent spillage from entering drains. Any release to the environment	
	may be subject to federal/national or local reporting requirements.	
Methods and materials for containment and cleaning up	Stop leak if possible without personal risk. Ventilate closed spaces before entering. Completely contain spilled materials with dikes, sandbags, etc. Remove contaminated soil or collect with appropriate absorbent and place into suitable container. Keep container tightly closed and properly labeled. Liquid material may be removed with a properly rated vacuum truck. Properly dispose of in accordance with all applicable regulations. See Section 13, Disposal considerations, for additional information.	

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

Read all safety precautions prior to handling. Do not breathe gas, vapors, or spray mist. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not taste or swallow. When using, do not eat, drink or smoke. See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

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

Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Store in a cool, dry area. Store in a well-ventilated area. Hygroscopic material. Keep away from incompatible materials (see section 10 for incompatibilities).

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# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational exposure controls:

Component	Exposure Limits	Basis	Entity
Methylene Chloride	50 ppm (174 mg/m <sup>3</sup> )	TWA	ACGIH® TLVs®
	25 ppm	TWA	OSHA PELs
	125 ppm	STEL	OSHA PELs
Propylene oxide	2 ppm (4.8 mg/m <sup>3</sup> )	TWA	ACGIH® TLVs®
	100 ppm (240 mg/m <sup>3</sup> )	TWA	OSHA PELs

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes. IDLH: Immediately Dangerous to Life or Health WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

#### **Personal Protection**

Eyes	Wear chemical safety glasses or goggles.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear nitrile or rubber gloves, apron or lab coat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Other	Handle in accordance with good industrial hygiene and safety practice.

#### **Other Recommendations**

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Colorless liquid.
Odor	Mildly sweet odor, chloroform-like odor
Odor threshold	200-300 ppm (causes olfactory fatigue)
pH	Not Available
Melting point/freezing point	-95°C (-139°F)
Initial boiling point and boiling range	40°C (104°F)
Flash point	Not Available
Evaporation rate	0.7 (ether=1)
Flammability (solid, gas)	Not Available
Upper/lower flammability or explosive limit	Upper: 19% at 100°C / Lower: 12% at 100100°C
Vapor pressure	350 mmHg at 20°C and 435 mmHG @ 25°C
Vapor density	2.9 (air=1)
Density	1.31 – 132 at 25°C (water=1)
Solubility (ies)	1.32% @ 25 C or 13,000 mg/l at 25°C (water)
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	556.1 °C (1033°F)
Decomposition temperature	Not Available

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# 10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat. Reacts violently with active metals. Avoid contact with incompatible substances and conditions due to generation of phosgene and other toxic and irritating substances.
Conditions to Avoid	None known.
Incompatible Materials	Aluminum, magnesium, zinc, and their alloys, Bases, Oxygen, Amines, Reactive metals, Sodium, Potassium, Strong oxidizing agents, Alkali metals
Hazardous Decomposition Products	hydrogen chloride, chlorine, phosgene, oxides of carbon

# 11. TOXICOLOGICAL INFORMATION

# **Acute Toxicity**

Methylene chloride

Skin	No data available
Eyes	No data available
Respiratory	LC50 - Rat - 53 mg/L 6h
Ingestion	LD50 - Rat - 1,600 mg/kg

# Propylene oxide

Skin	LD50 Dermal – Rabbit – 1244 mg/kg
Eyes	No data available
Respiratory	LC50 - Rat - 0.948 mg/L 4h
Ingestion	LD50 – Rat – 520 mg/kg

# Carcinogenicity

IARC	2B: Possibly carcinogenic to humans.
ACGIH	A3: Animal carcinogen.
NTP	Reasonably anticipated to be a human carcinogen (Methylene chloride).
OSHA	1910.1052 (Methylene chloride).

## Signs & Symptoms of Exposure

Skin	Skin irritation, intense burning sensation, redness and numbness.
Eyes	Eye irritation, burning, redness, blurred vision, tears.
Respiratory	Pulmonary irritation, cough, chest discomfort, shortness of breath, headache, euphoria,
	nausea and vomiting, respiratory irritation.
Ingestion	Nausea, vomiting, mucosal irritation with burning sensation.

Chronic Toxicity	May cause liver damage. May cause cancer.
Teratogenicity	Passes through the placenta, excreted in maternal milk.
Mutagenicity	Not Available
Embryotoxicity	Not Available
Target organ(s)	Liver, Pancreas, Blood, Central nervous system, Heart, Kidney,
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

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## 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

### 13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.
Product	Users should review their operations in terms of the applicable federal/national or
Containers	local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

## 14. TRANSPORTATION INFORMATION

US DOT	UN1593, Dichloromethane, 6.1, pg III
TDG	UN1593, DICHLOROMETHANE, 6.1, pg III
IMDG	UN1593, DICHLOROMETHANE, 6.1, pg III
Marine Pollutant	No
IATA/ICAO	UN1593, Dichloromethane, 6.1, pg III

## 15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA Active inventory.
DSL / NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Listed
Massachusetts: Toxic or Hazardous Substance List, Right to Know	Listed
New Jersey: Right to Know Hazardous Substance List	Listed
Pennsylvania: Hazardous Substance List	Listed
Rhode Island: Hazardous Substance List	Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Acute Health Hazard, Chronic Health Hazard
SARA 312	Acute Health Hazard, Chronic Health Hazard

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SARA 313	Listed: Methylene Chloride
WHMIS Canada	Class D1B: Toxic material causing immediate and serious toxic effects. Class D2A: Very toxic material causing other toxic effects.
	Class D2B: Toxic material causing other toxic effects.

#### 16. OTHER INFORMATION

Revision	Date
Revision 1	07/16/2012
Revision 2	08/05/2013
Revision 3	11/18/2019
Revision 4	10/13/2021

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