

EPIGRAL., UNIT-Dahej

| | | | | |
|-----------------------------------|------------------|-----------------------|-------------|----------------|
| MATERIAL SAFETY DATA SHEET | MSDS NO.: | REVISION DATE: | PAGE | EPIGRAL |
| Methylene chloride | 14 | 31/08/2023 | 1 of 9 | |

Epigral Ltd. urges the customers receiving this Material Safety Data Sheet (MSDS) to study it carefully to become aware of hazards, if any, of the product involved. In the interest of Safety, you should notify your employee, agent & contractors about the information on this sheet, furnish a copy of each of your customers for the product, and request your customers to inform their employees and customers as well.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

CAS-No 75-09-2

Synonyms Dichloromethane; DCM

Recommended Use Laboratory chemicals.

1.2.Uses advised against. This chemical/product is not and cannot be distributed in commerce (as defined in TSCA Section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

Details of the supplier of the safety data sheet

Company : Epigral Limited
Plot No. CH1.CH2,Industrial Estate
Dahej, Taluka : Vagra
Bharuch-392 130
Gujarat
INDIA

Emergency telephone number Emergency

Phone # : +91 9904099337 **SECTION 2** :

Hazards identification

2.1 Classification of the substance or mixture

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

| | |
|--|-------------|
| Skin Corrosion/Irritation | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Carcinogenicity | Category 1B |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Central nervous system (CNS). | |
| Specific target organ toxicity - (repeated exposure) | Category 2 |
| Target Organs - Liver, Kidney, Blood. | |

Label Elements

Signal Word Danger

Causes skin irritation

Causes serious eye irritation

May cause drowsiness or dizziness

May cause cancer

May cause damage to organs through prolonged or repeated exposure

EPIGRAL., UNIT-Dahej

| | | | | |
|-----------------------------------|------------------|-----------------------|-------------|----------------|
| MATERIAL SAFETY DATA SHEET | MSDS NO.: | REVISION DATE: | PAGE | EPIGRAL |
| Methylene chloride | 14 | 31/08/2023 | 2 of 9 | |



Precautionary Statements

Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area

Response

IF exposed or concerned: Get medical attention/advice

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention

Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

SECTION 3: Composition/information on ingredients

| Component | CAS No | Weight |
|--------------------|---------------|---------------|
| Methylene chloride | 75-09-2 | >99.5 |

EPIGRAL., UNIT-Dahej

| | | | | |
|-----------------------------------|------------------|-----------------------|-------------|----------------|
| MATERIAL SAFETY DATA SHEET | MSDS NO.: | REVISION DATE: | PAGE | EPIGRAL |
| Methylene chloride | 14 | 31/08/2023 | 3 of 9 | |

SECTION 4: First aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects

. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Causes central nervous system depression: Continued or high exposures by inhalation will cause anaesthetic effects. This may result in a loss of consciousness and could prove fatal: Causes formation of carbon monoxide in the blood. Carbon monoxide may cause adverse effects on the cardiovascular system and the central nervous system

Notes to Physician Treat symptomatically

SECTION 5: Fire fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO₂), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available

Method - No information available

Autoignition Temperature 556 °C / 1032.8 °F

Explosion Limits

Upper 23 vol %

Lower 13 vol %

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO₂) Hydrogen chloride gas Phosgene

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health

Flammability

Instability

Physical Hazards

2

1

0

N/A

EPIGRAL., UNIT-Dahej

| | | | | |
|-----------------------------------|------------------|-----------------------|-------------|----------------|
| MATERIAL SAFETY DATA SHEET | MSDS NO.: | REVISION DATE: | PAGE | EPIGRAL |
| Methylene chloride | 14 | 31/08/2023 | 4 of 9 | |

SECTION 6: Accidental release measures

Personal Precautions Use personal protective equipment as required. Ensure adequate ventilation.

Environmental Precautions Should not be released into the environment.

Methods for Containment and Clean Up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

Handling Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Vapors are heavier than air and may spread along floors. Handle product only in closed system or provide appropriate exhaust ventilation.

Reacts with aluminium and its alloys.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store in

SECTION 8: Exposure controls/personal protection

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH | Mexico OEL (TWA) |
|--------------------|-------------|---|----------------|------------------|
| Methylene chloride | TWA: 50 ppm | (Vacated) TWA: 500 ppm (Vacated) STEL: 2000 ppm (Vacated) Ceiling: 1000 ppm TWA: 25 ppm STEL: 125 ppm | IDLH: 2300 ppm | TWA: 50 ppm |

Legend

ACGIH -

American Conference of Governmental Industrial Hygienists

OSHA -

Occupational Safety and Health Administration

NIOSH IDLH:

*The National Institute for Occupational Safety and Health
Immediately Dangerous to Life or Health*

Engineering Measures

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

EPIGRAL., UNIT-Dahej

| | | | | |
|-----------------------------------|------------------|-----------------------|-------------|----------------|
| MATERIAL SAFETY DATA SHEET | MSDS NO.: | REVISION DATE: | PAGE | EPIGRAL |
| Methylene chloride | 14 | 31/08/2023 | 5 of 9 | |

SECTION 9: Physical and chemical properties

| | |
|---|----------------------------------|
| Physical State | Liquid |
| Appearance | Colorless |
| Odor | sweet |
| Odor Threshold | No information available |
| pH | No information available |
| Melting Point/Range | -97 °C / -142.6 °F |
| Boiling Point/Range | 39 °C / 102.2 °F |
| Flash Point | No information available |
| Evaporation Rate | No information available |
| Flammability (solid,gas) | Not applicable |
| Flammability or explosive limits | |
| Upper | 23 vol % |
| Lower | 13 vol % |
| Vapor Pressure | 350 mbar @ 20°C |
| Vapor Density | 2.93 (Air = 1.0) |
| Specific Gravity | 1.33 |
| Solubility | No information available |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | 556 °C / 1032.8 °F |
| Decomposition Temperature | No information available |
| Viscosity | 0.42 mPas @ 25°C |
| Molecular Formula | C H ₂ Cl ₂ |
| Molecular Weight | 84.93 |

SECTION 10: Stability and reactivity

| | |
|---|--|
| Reactive Hazard | None known, based on information available |
| Stability | Stable under normal conditions. Decomposes on exposure to light. |
| Conditions to Avoid | Excess heat. Protect from direct sunlight. |
| Incompatible Materials | Strong oxidizing agents, Strong acids, Amines |
| Hazardous Decomposition Products | Carbon monoxide (CO), Carbon dioxide (CO ₂), |
| Hydrogen chloride gas, Phosgene | |
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Hazardous Reactions | Forms a detonable mixture with nitric acid. |
| In the event of fire: see section 5 | |

SECTION 11: Toxicological information

Acute Toxicity
Product Information
Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------------------|----------------------|----------------------|--|
| Methylene chloride | > 2000 mg/kg (Rat) | > 2000 mg/kg (Rat) | 53 mg/L (Rat) 6 h 76000 mg/m ³ (Rat) 4 h |

EPIGRAL., UNIT-Dahej

| | | | | |
|-----------------------------------|------------------|-----------------------|-------------|----------------|
| MATERIAL SAFETY DATA SHEET | MSDS NO.: | REVISION DATE: | PAGE | EPIGRAL |
| Methylene chloride | 14 | 31/08/2023 | 6 of 9 | |

IARC: (International Agency for Research on Cancer) *IARC: (International Agency for Research on Cancer)*

*Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans*

NTP: (National Toxicity Program)

*NTP: (National Toxicity Program)
Known - Known Carcinogen
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen*

ACGIH: (American Conference of Governmental Industrial Hygienists)

*A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
ACGIH: (American Conference of Governmental Industrial Hygienists)*

Mexico - Occupational Exposure Limits - Carcinogens *Mexico - Occupational Exposure Limits - Carcinogens*

*A1 - Confirmed Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Confirmed Animal Carcinogen
A4 - Not Classifiable as a Human Carcinogen
A5 - Not Suspected as a Human Carcinogen*

Mutagenic Effects

Mutagenic effects have occurred in microorganisms.

Reproductive Effects

No information available.

Developmental Effects

No information available.

Teratogenicity

No information available.

STOT - single exposure

Central nervous system (CNS)

STOT - repeated exposure

Liver Kidney Blood

Aspiration hazard

No information available

Symptoms / effects, both acute and delayed : Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Causes central nervous system depression: Continued or high exposures by inhalation will cause anaesthetic effects. This may result in a loss of consciousness and could prove fatal: Causes formation of carbon monoxide in the blood. Carbon monoxide may cause adverse effects on the cardiovascular system and the central nervous system

Endocrine Disruptor Information *No information available*

Other Adverse Effects

Tumorigenic effects have been reported in experimental animals.

SECTION 12: Ecological information

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---------------------------|---------------------|--|-------------------|--------------------|
| Methylene chloride | EC50: >660 mg/L/96h | Pimephales promelas: LC50: 193 mg/L/96h | EC50: 1 mg/L/24 h | EC50: 140 mg/L/48h |

EPIGRAL., UNIT-Dahej

| | | | | |
|-----------------------------------|------------------|-----------------------|-------------|----------------|
| MATERIAL SAFETY DATA SHEET | MSDS NO.: | REVISION DATE: | PAGE | EPIGRAL |
| Methylene chloride | 14 | 31/08/2023 | 7 of 9 | |

| | | | |
|--|--|--|------------------------|
| | | | EC50: 2.88 mg/L/15 min |
|--|--|--|------------------------|

Persistence and Degradability Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its volatility.

| | |
|--------------------|----------------|
| Component | log Pow |
| Methylene chloride | 1.25 |

SECTION 13: Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

| | | |
|--------------------|-------------------------------|-------------------------------|
| Component | RCRA - U Series Wastes | RCRA - P Series Wastes |
| Methylene chloride | U080 | -- |

SECTION 14: Transport information

DOT

UN-No UN1593
Proper Shipping Name DICHLOROMETHANE
Hazard Class 6.1
Packing Group III

TDG

UN-No UN1593
Proper Shipping Name DICHLOROMETHANE
Hazard Class 6.1
Packing Group III

IATA

UN-No UN1593
Proper Shipping Name Dichloromethane
Hazard Class 6.1
Packing Group III

IMDG/IMO

UN-No UN1593
Proper Shipping Name Dichloromethane
Hazard Class 6.1
Packing Group III

SECTION 15: Regulatory information

United States of America Inventory

| | | | | |
|------------------|---------------|-------------|--------------------------------------|------------------------------|
| Component | CAS-No | TSCA | TSCA Inventory notification - | TSCA - EPA Regulatory |
|------------------|---------------|-------------|--------------------------------------|------------------------------|

EPIGRAL., UNIT-Dahej

| | | | | |
|-----------------------------------|------------------|-----------------------|-------------|----------------|
| MATERIAL SAFETY DATA SHEET | MSDS NO.: | REVISION DATE: | PAGE | EPIGRAL |
| Methylene chloride | 14 | 31/08/2023 | 8 of 9 | |

| | | | Active/Inactive | Flags |
|---------------------------|---------|---|------------------------|--------------|
| Methylene chloride | 75-09-2 | X | ACTIVE | R |

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

Section 6(a) of the Toxic Substances Control Act (TSCA)

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

TSCA 12(b) - Notices of Export Not applicable

| Component | CAS No. | DSL | NDSL | EINECS | ELIN CS | PIC CS | EN CS | AICS | IECSC | KECL |
|---------------------------|---------|-----|------|-----------|-----------|--------|-------|------|-------|----------|
| Methylene chloride | 75-09-2 | X | - | 204-825-9 | 200-838-9 | X | X | X | X | KE-23893 |

U.S. Federal Regulations

SARA 313

| Component | CAS No. | Weight % | SARA 313 - Threshold Values % |
|---------------------------|---------|----------|-------------------------------|
| Methylene chloride | 75-09-2 | >99.5 | 0.1 |

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---------------------------|----------------------------|-----------------------------|------------------------|---------------------------|
| Methylene chloride | - | - | X | X |

Clean Air Act

| Component | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|---------------------------|-----------|-------------------------|-------------------------|
| Methylene chloride | | - | - |

OSHA - Occupational Safety and Health Administration

| Component | Specifically Regulated Chemicals | Highly Hazardous Chemicals |
|---------------------------|---|----------------------------|
| Methylene chloride | 125 ppm STEL 12.5 ppm Action Level 25 ppm TWA | - |

CERCLA This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

EPIGRAL LTD., UNIT-Dahej

| | | | | |
|-----------------------------------|------------------|-----------------------|-------------|----------------|
| MATERIAL SAFETY DATA SHEET | MSDS NO.: | REVISION DATE: | PAGE | EPIGRAL |
| Methylene chloride | 14 | 31/08/2023 | 9 of 9 | |

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|--------------------|--------------------------|----------------|
| Methylene chloride | 1000 lb 1 lb | - |

California Proposition 65 This product contains the following proposition 65 chemicals

| Component | CAS-No | California Prop. 65 | Prop 65 NSRL | Category |
|--------------------|---------|---------------------|-------------------------|------------|
| Methylene chloride | 75-09-2 | Carcinogen | 200 µg/day 50 µg/day | Carcinogen |

U.S. State Right-to-Know Regulations

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|--------------------|---------------|------------|--------------|----------|--------------|
| Methylene chloride | X | X | X | X | X |

U.S. Department of Transportation

Reportable Quantity (RQ): Y
 DOT Marine Pollutant N
 DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

SECTION 16: Other information

MANUFACTURERS / SUPPLIERS DATA

| | | |
|-------------------------|---|-------------------------------------|
| Name of the firm | EPIGRAL LTD., | Contact Person in Emergency: |
| Mailing Address | CH1/CH2,GIDC Industrial Estate, Dahej Dist.: Bharuch, Gujarat (INDIA) | UNITE HEAD |
| Telephone Nos. | Fact.: 91-9909995940 | |
| | | Rev No : 04 (31/08/2023) |

DISCLAIMER

Information contained in this MSDS is believed to be reliable but no representation, guarantee or warranties of any kind are made as its accuracy. Suitability for a particular application or result to be obtained from them. It is up to the manufacturer / seller to ensure that the information contained in the MSDS is relevant to the product manufactured / handled or sold by him as the case may be. The EPIGRAL makes no warranties, expressed or implied, in respect of the adequacy of this document for any particular purpose.