

MATERIAL SAFETY DATA SHEET

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Issue Date:

1- Chemical Product Information and Company Identification.

Product Name: Dichloromethane AnStan[®] GC Reference standard (DCM).
Synonym: Methylene dichloride.
Product code: BS10082.
CAS Number: 75-09-2.
Company Name: Briti Scientific.
Company Address: Plot No: 78/B/13, SY-79, Phase-VI, Jeedimetla, Hyderabad- 500 055. Telangana, India.

Section 2- Composition / Information on Ingredients.

CAS No.	Chemical Name	Mol. Formula
75-09-2.	Methylene dichloride.	CH ₂ Cl ₂ .

Section 3- Hazards Identification.

Label elements

Labelling according Regulation (EC) No 1272/2008



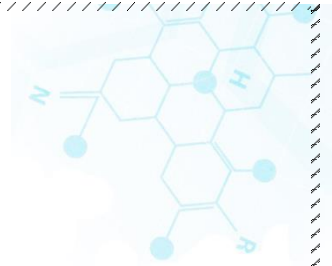
Signal word Warning

Hazard statement(s)

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.



Plot No: 78/B/13, SY-79, Phase-VI, Jeedimetla, Hyderabad - 500 055.
Telangana, India.



H373 May cause damage to organs (Liver, Blood, Central nervous system) through prolonged or repeated exposure.

Precautionary statement(s)

P261 Avoid breathing vapours.

P281 Use personal protective equipment as required.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Other hazards

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319 Carcinogenicity (Category 2), H351

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Specific target organ toxicity - repeated exposure, Oral (Category 2), Liver, Blood, H373

Specific target organ toxicity - repeated exposure, Inhalation (Category 2), Central nervous system, H373 For the full text of the H-Statements mentioned in this Section,

Label elements Labelling according Regulation (EC) No 1272/2008 word Warning

Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

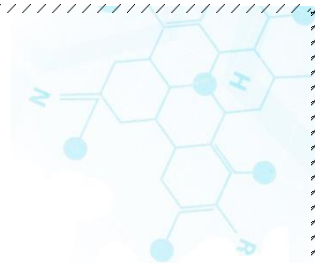
H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

H373 May cause damage to organs (Liver, Blood) through prolonged or repeated exposure if swallowed.

H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure if inhaled.





Precautionary statement(s)

- 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 skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/ eye protection/ face protection.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water
- P304 + P340 IF INHALED: 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.
- P321 Specific treatment (see supplemental first aid instructions on this label).
- P332 + P313 If skin irritation occurs: Get medical advice/ attention.
- P337 + P313 If eye irritation persists: Get medical advice/ attention.
- P362 Take off contaminated clothing and wash before reuse.
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant

Section 4- First Aid Measures.

Description of first aid measures:

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

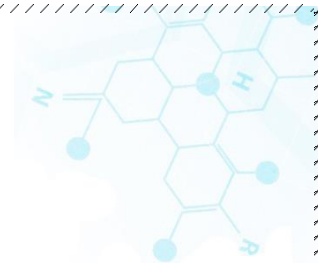
In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 4.3

Indication of any immediate medical attention and special treatment needed no data available





Section 5- Fire Fighting Measures.

Extinguishing media

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture no data available

Advice for fire-fighters Wear self-contained breathing apparatus for fire fighting if necessary.

Further information no data available

Section 6- Accidental Release Measures.

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Reference to other sections for disposal see section 13.

Section 7- Handling and Storage.

Precautions for safe handling Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Heat sensitive. Store under inert gas.

Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8- Exposure Control/Personal Protection.

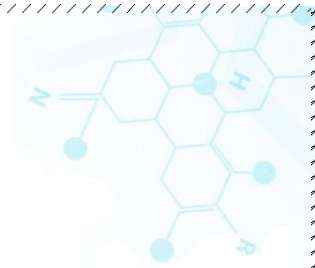
Exposure controls

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).





Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Splash contact

Material: Fluorinated rubber

Minimum layer thickness: 0.7 mm

Break through time: 148 min

Material tested: Vitoject[®] (KCL 890 / Aldrich Z677698, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

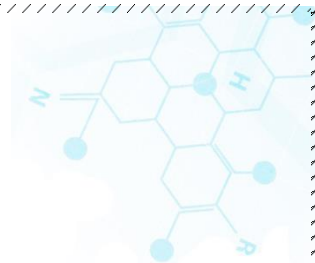
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Section 9- Physical and Chemical Properties.

Information on basic physical and chemical properties

- Appearance Form: liquid Colour: colourless
- Odour no data available
- Odour Threshold no data available
- pH no data
- Melting point/freezing point Melting point/range: -97 °C (-143 °F)
- Initial boiling point and boiling range 39.8 - 40 °C (103.6 - 104 °F)
- Flash points no data available
- Evaporation rate 0.71
- Flammability (solid, gas) no data available





- j) Upper/lower flammability or explosive limits Upper explosion limit: 19 %(V)
Lower explosion limit: 12 %(V)
- k) Vapour pressure 470.9 hPa (353.2 mmHg) at 20.0 °C (68.0 °F)
- l) Vapour density 2.93 - (Air = 1.0)
- m) Relative density 1.325 g/mL at 25 °C (77 °F)
- n) Water solubility slightly soluble
- o) Partition coefficient: noctanol/water log Pow: 1.25
- p) Auto-ignition temperature 556.1 °C (1,033.0 °F) 662.0 °C (1,223.6 °F)
- q) Decomposition temperature no data available
- r) Viscosity no data available
- s) Explosive properties no data available
- t) Oxidizing properties, no data available

Section 10- Stability and Reactivity.

Reactivity

no data available

Chemical stability

Stable under recommended storage conditions. Contains the following stabiliser(s): 2-Methyl-2-butene (>0.005 -

Possibility of hazardous reactions

no data available

Conditions to avoid

Heat, flames and sparks. Exposure to sunlight.

Incompatible materials

Alkali metals, Aluminium, Strong oxidizing agents, Bases, Amines, Magnesium, Strong acids and strong bases, Vinyl compounds

Hazardous decomposition products

Other decomposition products - no data available In the event of fire: see section 5

Section 11- Toxicological Information.

Information on toxicological effects

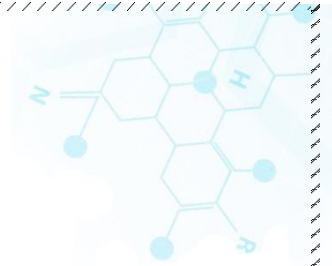
Acute toxicity

LD50 Oral - rat - > 2,000 mg/kg

LC50 Inhalation - rat - 52,000 mg/m³

LD50 Dermal - rat - > 2,000 mg/kg





Skin corrosion/irritation

Skin - rabbit

Result: Irritating to skin. - 24 h (Draize Test)

Serious eye damage/eye irritation

Eyes - rabbit

Result: Irritating to eyes. - 24 h (Draize Test)

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity rat DNA damage

Carcinogenicity

Carcinogenicity - rat - Inhalation

Tumorigenic: Carcinogenic by RTECS criteria.

Endocrine: Tumors.

Limited evidence of carcinogenicity in animal studies

Suspected human carcinogens

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Methylene chloride)

NTP: Reasonably anticipated to be a human carcinogen (Methylene chloride)

OSHA: OSHA specifically regulated carcinogen (Methylene chloride)

Specific target organ toxicity – single exposure

May cause respiratory irritation.

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Inhalation – May cause damage to organs through prolonged or repeated exposure. - Central nervous system

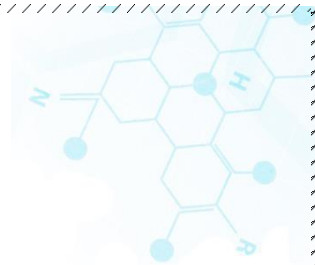
Oral - May cause damage to organs through prolonged or repeated exposure. - Liver, Blood

Additional Information

RTECS: PA8050000

Dichloromethane is metabolized in the body producing carbon monoxide which increases and sustains carboxyhemoglobin levels in the blood, reducing the oxygen-carrying capacity of the blood., Acts as a simple asphyxiant by displacing air., anesthetic effects, Difficulty in breathing, Headache, Dizziness, Prolonged or repeated contact with skin may cause:, defatting, Dermatitis, Contact with eyes can cause:, Redness, Blurred vision, Provokes tears., Effects due to ingestion may include:, Gastrointestinal discomfort, Central nervous system depression, Paresthesia., Drowsiness, Convulsions, Conjunctivitis., Pulmonary edema. Effects may be delayed., Irregular breathing., Stomach/intestinal disorders, Nausea, Vomiting, Increased liver enzymes., Weakness, Heavy or prolonged skin exposure may result in the absorption of harmful amounts of material., Abdominal pain





Section 12- Ecological Information.

Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 193.00 mg/l - 96 h

NOEC - Cyprinodon variegates (sheep head minnow) - 130 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 1,682.00 mg/l - 48 h

Persistence and degradability no data available

Bio accumulative potential no data available

Mobility in soil no data available

Results of PBT and vPvB assessment PBT/vPvB assessment

not available as chemical safety assessment not required/not conducted

Section 13- Disposal Considerations.

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

Section 14- Transport Information.

DOT (US)

UN number: 1593 Class:6.1 Packing group: III

Proper shipping name: Dichloromethane

Reportable Quantity (RQ): 1000 lbs

Marine pollutant: No

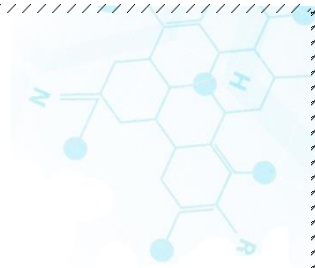
Poison Inhalation Hazard: No

IMDG

UN number: 1593 Class: 6.1 Packing group: III

EMS-No: F-A, S-A





Proper shipping name: DICHLOROMETHANE
Marine pollutant: No
IATA UN

number: 1593 Class: 6.1 Packing group: III

Proper shipping name: Dichloromethane

15-Other Regulatory Information.

REACH No. : 01-2119480404-41-XXXX

SARA 302 Components SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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

Methylene chloride CAS-No. 75-09-2 Revision Date 2007-07-01

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

Methylene chloride CAS-No. 75-09-2 Revision Date 2007-07-01

Pennsylvania Right To Know Components

Methylene chloride CAS-No. 75-09-2 Revision Date 2007-07-01

New Jersey Right To Know Components

Methylene chloride CAS-No. 75-09-2 Revision Date 2007-07-01

California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer.

Methylene chloride CAS-No. 75-09-2 Revision Date 2007-09-28

Section 16- Other Information.

Briti Scientific provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

