1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name: Methylene Chloride

Supplier: Ningbo Pangs Chem Co., Ltd.

2. HAZARD SYMBOLS

GHS CLASSIFICATIONS:

Health hazard	Environmental hazard	Physical hazard
Acute: undetected		
Skin corrosion/irritation: undetected		
Serious eye damage/irritation: undetected	Hazard to aquatic environment: no	No categorization
respiratory sensitization: undetected	data available	
Germ cell mutagenicity: no data available	Ozone depletion effect: none	
Carcinogenicity: category 2		
Reproductive toxicity: no data available		
Specific target organ toxicity following single		
exposure: no data available		
Specific target organ toxicity following		
repeated exposure: no data available		
Inhalation risk: no data available		

GHS symbols

Health hazard pictogram:



Signal word: WARNING **Hazard statements:**

H351: a potential carcinogen

Preventive measures:

P201 obtain special instructions before use.

P202 no removal before understand all the safety precautions

P281 wear necessary protective equipments.

P308+P313 in case of contact or health concern: consult a physician/seek diagnosis.

P405 make the storage room lockable.

P501 treat the inner package /container in compliance with local regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name of the substance: Methylene Chloride

Synonyms: DCM, , Dichloromethane,

CAS-No.: 75-09-2

4. HAZARDS IDENTIFICATION

Potential Acute Health Effects: Very hazardous in case of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (irritant, permeator). Inflammation of the eye is characterized by redness, watering, and itching.

Potential Chronic Health Effects: CARCINOGENIC EFFECTS: Classified + (Proven.) by OSHA. Classified 2B (Possible for human.) by IARC. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to lungs, the nervous system, liver, mucous membranes, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

5. FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Product name Methylene Chloride

6. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

SPECIFIC HAZARDS

Hydrogen chloride (HCI). Phosgene (COCI2). Oxides of: Carbon.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

7. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes. Provide adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS

Absorb with inert, damp, non-combustible material, then flush area with water. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

8. HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid contact with skin and eyes. Avoid inhalation of vapours.

STORAGE PRECAUTIONS

Keep containers tightly closed. Keep in original container. Keep away from heat, sparks and open flame. Unsuitable containers: copper, zinc, aluminium, copper alloy, zinc alloy, aluminium alloy.

9. EXPOSURE CONTROLS / PERSONAL PROTECTION

Name	Std	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
DICHLOROMETHANE	WEL	100 ppm(Sk)	350 mg/m3(Sk)	300 ppm(Sk)	1060 mg/m3(Sk)

PROTECTIVE EQUIPMENT







RESPIRATORY EQUIPMENT

If ventilation is insufficient, suitable respiratory protection must be provided.

HAND PROTECTION

Gloves of nitrile rubber, PVA or Viton are recommended.

Product name Methylene Chloride

EYE PROTECTION

Wear approved safety goggles.

OTHER PROTECTION

Wear rubber footwear. Wear rubber apron.

10. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Liquid COLOUR Clear

ODOUR Characteristic

SOLUBILITY Slightly soluble in water.

BOILING POINT (°C) 39.8 MELTING POINT (°C) -96.7 RELATIVE DENSITY 1.320 VAPOUR DENSITY (air=1) 2.93

AUTO IGNITION

TEMPERATURE (°C) 556 FLAMMABILITY LIMIT - LOWER(%) 14 FLAMMABILITY LIMIT - UPPER(%) 22 PARTITION COEFFICIENT 1.25

(N-Octanol/Water)

11. STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid exposure to high temperatures or direct sunlight.

HAZARDOUS POLYMERISATION

Will not polymerise.

MATERIALS TO AVOID

Strong alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS

Hydrogen chloride (HCI). Phosgene (COCI2). Oxides of: Carbon.

12. TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 1500 - 2500 mg/kg (oral rat)

INHALATION

Vapours may irritate the respiratory system and cause coughing, asthmatic breathing and breathlessness.

INGESTION

Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

SKIN CONTACT

Prolonged contact may cause redness and irritation. Causes burns.

Product name Methylene Chloride

EYE CONTACT

Extreme irritation of eyes and mucous membranes, including burning and tearing. Risk of serious damage to eyes.

Other Health Effects

Carcinogen Category 3.

13. ECOLOGICAL INFORMATION

LC 50, 96 Hrs, FISH mg/l 224
EC 50, 48 Hrs, DAPHNIA, mg/l 480
IC 50, 72 Hrs, ALGAE, mg/l 662

MOBILITY

The product has poor water-solubility.

DEGRADABILITY

The product is not expected to be biodegradable.

14. DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

When handling waste, consideration should be made to the safety precautions applying to handling of the product. Do not puncture or incinerate even when empty.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

15. TRANSPORT INFORMATION



MARITIME CLASS	6.1
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PROPER SHIPPING NAME DICHLOROMETHANE

UN NO 1593

PACK GROUP III
MARINE POLLUTANT N

ADR CLASS 6.1

ADR PACK GROUP Ш HAZARD No. (ADR) 60 ADR LABEL NO. **HAZCHEM CODE** 2Z 6.1 61GT1-III CEFIC TEC(R) NO. RID CLASS NO. 6.1 **RID PACK GROUP** Ш UN NO. SEA 1593 **IMDG** 6.1 IMDG PACK GR. CLASS **EMS** F-A, S-A **MFAG** See Guide

Product name Methylene Chloride

 MARINE POLLUTANT
 No.
 UN NO. AIR
 1593

 AIR
 6.1
 AIR PACK GR.
 CLASS

16. REGULATORY INFORMATION

CONTAINS DICHLOROMETHANE

RISK PHRASES

R40 Limited evidence of a carcinogenic effect.

SAFETY PHRASES

S23 Do not breathe vapour/spray.
S24/25 Avoid contact with skin and eyes.
S36/37 Wear suitable protective clothing and gloves.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations.

APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

17. OTHER INFORMATION

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.