

Safety Data Sheet

1. IDENTIFICATION

Product Name:	Isohexane 99%
Other Names:	2-Methylpentane, 1,1-Dimethylbutane
Recommended Use:	Industrial Chemical
Supplier:	Global Chemie ASCC Limited
Street Address:	88/123 Moo 2 Bangpoo Industrial Estate (North), Phraek Sa Mai, Mueang Samutprakan, Samutprakan 10280
Telephone:	+66 2324 6888
Fax:	+66 2324 6898-99
Emergency phone:	+66 2324 6888 ext.320

2. HAZARDS IDENTIFICATION

Health Hazard Classification

This material is hazardous according to GHS criteria.

Hazardous Categories

Flammable Liquid Category 2

Skin Corrosion/Irritation Category 2

Reproductive toxicity Category 2

Specific target organ toxicity – Single exposure Category 3 (anesthetic effects)

Specific target organ toxicity -Repeated exposure category 2

Aspiration Hazard Category 1

Hazardous to the aquatic environment, long term hazard Category 2

GHS Pictograms



Hazard Statements

H225: Highly flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

H336: May cause drowsiness or dizziness.

H361: Suspected of damaging fertility.

H373: May cause damage to organs through prolonged or repeated exposure.

H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat/sparks/open flames/hot surfaces. -- No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical, ventilating and lighting equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P260: Do not breathe mist / vapours.

P264: Wash skin thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

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

Response

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308 + P316: IF exposed or concerned: Get medical advice immediately.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P331: Do NOT induce vomiting.

P332 + P313: If skin irritation occurs: Get medical advice/attention.

P362 + P364: Take off contaminated clothing and wash it before reuse.

P370 + P378: In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish.

Storage

P403 + P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

Disposal

P501: Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations.

Signal Word Danger

3. COMPOSITION: Information on Ingredients

Chemical Ingredient	CAS No.	UN No.	Proportion (%)
Isohexane	107-83-5	1208	99
n-Hexane	110-54-3	1208	1

Molecular Formula: C₆H₁₄

Molecular Weight: 86.1 g/mol

4. FIRST AID MEASURES

For advice, contact Ramathibodi Poison Center (Phone: 1367) or a doctor.

Inhalation

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Skin contact

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Ingestion

If victim is conscious and alert, give 2-4 cupful of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

5. FIRE FIGHTING MEASURES

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Extremely flammable liquid and vapor.

Suitable Extinguishing Media: Use water spray, chemical powder, CO₂, foam.

Special hazards arising from the chemical: No data available.

Special protective actions for fire-fighters: No data available.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use proper personal protective equipment. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Scoop up with a non-sparking tool, then place into a suitable container for disposal. Remove all sources of ignition.

Environmental precautions: No data available.

7. HANDLING AND STORAGE**HANDLING**

Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Avoid contact with skin and eyes. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Take precautionary measures against static discharges.

Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

STORAGE

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry place. Do not store in direct sunlight. Keep container closed when not in use.

8. EXPOSURE CONTROLS: PERSONAL PROTECTION**EXPOSURE LIMIT VALUES**

Germany: 200 ppm (TWA; 720 mg/m³)

TWA Netherlands: 200 ppm (MAC; 720 mg/m³)

Engineering Controls

No data available.

Personal Protective

Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29CFR 1910.133 or European Standard EN166.

Respiratory Protection: Use a NIOSH/MSHA or European Standard EN149 approved respirators if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hand Protection: The types of gloves to be considered for this material include Chemical resistant gloves are recommended. Nitrile

Skin/ Body Protection: Wear appropriate protective clothing to prevent skin exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of Measurement	Typical Value
Appearance	-	Colorless Liquid
Odour	-	No data available
pH	-	No data available
Boiling point	°C	62

Property	Unit of Measurement	Typical Value
Melting point	°C	-154
Flash point	°C	-23.33
Flammability	-	Flammable liquid
Autoignition Temperature	°C	306.11
Decomposition Temperature	°C	No data available
Lower/Upper Flammability Limits	%V	1.0-7.0
Density @ 20°C	g/cm ³	0.66
Specific Gravity @ 20°C	-	No data available
Viscosity @ 20°C	cSt.s	No data available
Vapor pressure	mmHg	180 at 21 deg C
Vapor density	kPa (Air = 1)	No data available
Evaporation Rate	(n-Butyl acetate = 1)	No data available
Water Solubility	-	Insoluble
Solubility in other solvents Partition coefficient	(n-octanol/water)	No data available
Coefficient of Thermal Expansion	per Deg °C	No data available
Particle Characteristic	-	No data available

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

10. STABILITY AND REACTIVITY

Chemical Stability

Material is stable under normal conditions.

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

Hazardous decomposition products

Carbon monoxide (CO) and carbon dioxide (CO₂).

Possibility of Hazardous reactions

No data available.

Materials to Avoid

No data available.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Acute health effects: Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo. Accidental ingestion of the material may be damaging to the health of the individual. Swallowing of the liquid may cause aspiration of vomit into the lungs with the risk of haemorrhaging, pulmonary oedema, progressing to chemical pneumonitis; serious consequences may result. Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. The material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions.

Chronic health effects: Repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.

12. ECOLOGICAL INFORMATION

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Carcinogenic: Not listed by ACGIH, IARC, or NTP.

Mobility in soil: No data available.

Other adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

14. TRANSPORT INFORMATION

Road and Rail Transport		Marine Transport		Air Transport	
UN No.	1208	UN No.	1208	UN No.	1208
Class/Item	3	Class/Item	3	Class/Item	3
Hazard Symbol	Flammable Liquid	Hazard Symbol	Flammable Liquid	Hazard Symbol	Flammable Liquid
Proper Shipping Name	HEXANES	Proper Shipping Name	HEXANES	Proper Shipping Name	HEXANES (ALL ISOMERS)
Packing Group	II	Packing Group	II	Packing Group	II
		Marine Pollutant	No data available		

Dangerous Goods Segregation

This product is classed as Dangerous Goods Class 3, packing group II. Please consult the Australian Dangerous Goods Code for Transport by Road and Rail for information.

15. REGULATORY INFORMATION**Regulations :**

European/International Regulations

European Labelling in Accordance with EC Directives

Hazard Symbols: XN F N

Risk Phrases:

R 11 Highly flammable.

R 38 Irritating to skin.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 65 Harmful: may cause lung damage if swallowed.

R 67 Vapours may cause drowsiness and dizziness.

Safety Phrases:

S 9 Keep container in a well-ventilated place.

S 16 Keep away from sources of ignition – No smoking.

S 29 Do not empty into drains.

S 33 Take precautionary measures against static discharges.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

S 62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

WGK (Water Danger/Protection)

CAS# 107-83-5: 1

Canada

CAS# 107-83-5 is listed on Canada's DSL List.

CAS# 107-83-5 is listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 107-83-5 is listed on the TSCA inventory.

16. OTHER INFORMATION

National Fire Protection Association (USA) : No data available

SDS Distribution : The information contained herein is based on our current knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental requirements only. No warranty of guarantee is expressed or implied regarding the accuracy of these data or the results to be obtained from the use of the product.

Prepared By : Quality Control Department / Global Chemie ASCC Limited

Abbreviations:

No data available.

References:

- Supplier Material Safety Data Sheets
- <http://chem.sis.nlm.nih.gov/chemidplus>
- <http://hsis.ascc.gov.au/SearchHS.aspx>
- The Globally Harmonized System of Classification and Labelling of Chemicals

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. No warranty and guarantee are expressed or implied regarding the accuracy of these data or the results to be obtained from the use of the product for further information, please contact Global Chemie ASCC Limited.