



SAFETY DATA SHEET

HEXANE

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: HEXANE

Recommended use: Chemical for industrial

Manufacturer/Supplier: MODERN CHEMICAL CO.,LTD.
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2. HAZARDS IDENTIFICATION

Label elements

Pictogram



Signal word

Danger

Hazard statement(s):

- 1.) Highly flammable liquid and vapor.
- 2.) May be fatal if swallowed and enters airways.
- 3.) Causes skin irritation.
- 4.) May cause drowsiness or dizziness.
- 5.) Suspected of damaging fertility.
- 6.) May cause damage to organs through prolonged or repeated exposure. Peripheral Nervous system
- 7.) Toxic to aquatic life with long lasting effects.

Precautionary statement(s):

- 1.) Obtain special instructions before use.



- 2.) Do not handle until all safety precautions have been read and understood.
- 3.) Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- 4.) Keep container tightly closed.
- 5.) Ground / bond container and receiving equipment.
- 6.) Use explosion-proof electrical, ventilating, and lighting equipment.
- 7.) Use only non-sparking tools.
- 8.) Take precautionary measures against static discharge.
- 9.) Do not breathe mist /vapours.
- 10.) Wash skin thoroughly after handling.
- 11.) Use only outdoors or in a well-ventilated area.
- 12.) Avoid release to the environment.
- 13.) Wear protective gloves/protective clothing/eye protection/face protection.
- 14.) IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- 15.) IF ON SKIN: Wash with plenty of soap and water.
- 16.) IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- 17.) IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- 18.) IF exposed or concerned: Get medical advice/attention.
- 19.) Call a POISON CENTER or doctor/physician if you feel unwell.
- 20.) Do NOT induce vomiting.
- 21.) If skin irritation occurs: Get medical advice/attention.
- 22.) Take off contaminated clothing and wash it before reuse.
- 23.) In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish.
- 24.) Collect spillage.
- 25.) Store in a well-ventilated place. Keep cool.
- 26.) Store locked up.
- 27.) Dispose of contents and container in accordance with local regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym: N/A

Ingredients	% (w/w)	CAS NO.
HEXANE	100	64742-49-0



4. FIRST AID MEASURES

- General advice:** No data available.
- Inhalation:** Remove from further exposure. For those providing assistance, avoid exposure to yourself or other. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.
- Skin contact:** Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.
- Eye contact:** Flush thoroughly with water. If irritation occurs, get medical assistance.
- Ingestion:** Seek immediate medical attention. Do not induce vomiting.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use foam, dry chemical or carbon dioxide to extinguish flames.

Unsuitable Extinguishing Media:

Straight streams of water.

Specific hazards arising from Chemicals:

Highly flammable. Vapour is flammable and heavier than air. Vapour may travel across the ground and reach remote ignition sources, causing a flashback fire danger.

Special protective equipment for fire-fighters:

Wear appropriate personal protective equipment, Wear Chemical resistant clothing, Safety helmet, gloves and boots. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA).

6. ACCIDENTAL RELEASE MEAS

- Precautions:** Avoid contact with spilled material. Keep unnecessary and unprotected personnel away. Keep upwind, evacuate downwind. Warn personnel of toxicity and flammability of the substance. Evacuate personnel to safe areas. See Section 5 for fire fighting information. See Section 3 for the Hazard Identification. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expect judgment of the



emergency responders.

For emergency responders: Respiratory protection: half-face or full-face respirator with filter(s) for organic vapor and, when applicable, H₂S, or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to aromatic hydrocarbons are recommended. Note: gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

Environmental precautions: Large Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

Methods and Material for Containment and Clean Up:

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. A vapour-suppressing foam may be used to reduce vapour. Use clean non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Large Spills: Water spray may reduce vapour, but may not prevent ignition in enclosed spaces.

Water Spill: Stop leak if you can do so without risk. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek advice of a specialist. Seek the advice of a specialist before using dispersants. Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note. Local regulations may prescribe or limit action to be taken.



7. HANDLING AND STORAGE

Precautions for Safe Handling & Product Transfer:

Avoid all personal contact. Prevent exposure to ignition sources, for example use non-sparking tools and explosion-proof equipment. Potentially toxic/irritating fumes/vapour may be evolved from heated or agitated material. Use only with adequate ventilation. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or ground procedures. However, bonding and earthing may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics-Code of practice for the avoidance of hazards due to static electricity).

Conditions for Safe Storage & Unsuitable Materials:

Ample fire water supply should be available. A fixed sprinkler/deluge system is recommended. The type of container used to store the material may effect static accumulation and dissipation. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Storage containers should be earthed and bonded. Fixed storage containers, transfer containers and associated equipment should be grounded and bonded to prevent accumulation of static charge.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: TWA 500 ppm, STEL 1000 ppm.

Appropriate Engineering Controls: Adequate ventilation should be provided so that exposure limits are not exceeded. Use explosion-proof ventilation equipment.

Individual Protection Measures

Respiratory protection: Wear half-face filter respirator Type A filter material. For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace



worn or damaged gloves. The types of gloves to be considered for this material include: Chemical resistant gloves are recommended. Nitrile.

Eye protection:

If contact is likely, safety glasses with side shields are recommended.

Skin and body protections:

Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include: Chemical/oil resistant clothing is recommended.

Hygiene measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form, Color and Odor : liquid, Colorless , Petroleum/Slight	Evaporation rate : 14 (n-butyl acetate = 1)
Melting Point : N/D	Specific gravity : 0.670-0.685 g/cm ³ at 15 °C
pH : N/A	Solubility in water : Negligible
Boiling point : 64 - 70 °C	Viscosity : 0.44 cSt at 40 °C
Vapour pressure : 17.6 kPa at 20 °C	Vapour density (air=1) : 2.9 at 101 kPa
Lower explosive limits : 1.2 %Vol	Upper explosive limits : 8.3 %Vol
Auto-ignition temperature : 280 °C	Flash point: -28 °C
Odour threshold: N/D	Flammability (solid, gas): N/A
Decomposition temperature: N/D	Solubility in other solvents: N/A
n-octanol/water partition coefficient (log P_{ow}): N/D	

10. STABILITY AND REACTIVITY**Chemical Stability:**

Material is stable under normal conditions.

Reactions:

No data available.

Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

Conditions to avoid:

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

Materials to avoid:

Strong oxidizers.

Hazardous decomposition products:

Material does not decompose at ambient temperatures.



11. TOXICOLOGICAL INFORMATION

Acute toxicity:	LD50 (Oral, rat): >5000 mg/kg LD50 (Skin, rabbit): >3350 mg/kg LC50 (Inhalation, rat): > 20 mg/l
Sensitization:	Vapour/aerosol concentration above recommended exposure levels are irritation to the eyes and respiratory tract, may cause headaches, dizziness, anaesthesia, drowsiness, unconsciousness and other central nervous system effects including death. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema. Exposure to this material, or one of its components, in situations where there is the potential for high levels, such as in confined spaces or with abuse, may result in abnormal heart rhythm (arrhythmia). High-level exposure to hydrocarbons (above occupational exposure limits) may initiate arrhythmia in a worker that is undergoing stress or is taking a heart-stimulating substance such as epinephrine, a nasal decongestant, or an asthma or cardiovascular drug.
Chronic toxicity:	Anticipated health effects from sub-chronic, chronic, respiratory or skin sensitization, mutagenicity, reproductive toxicity, carcinogenicity, target organ toxicity (single exposure or repeated exposure), aspiration toxicity and other effects based on human experience and/or experimental data.
Further toxicological information:	No data available.

12. ECOLOGICAL INFORMATION

Toxicity	
Toxicity to fish:	No data available.
Toxicity to daphnia and other aquatic invertebrates:	No data available.
Toxicity to algae:	No data available.
Toxicity to bacteria:	No data available.
Biodegradability Remarks:	Expected to be readily biodegradable.
Bioaccumulative Potential:	No data available.



Mobility: Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

Affected in any other way: Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Material Disposal: Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

Container Disposal: Empty Container warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death.

14. TRANSPORT INFORMATION

ADR/RID

UN-No: 1208 Class: 3 Packing group: II

Proper shipping name: HEXANES

IMDG

UN-No: 1208 Class: 3 Packing group: II

Ems: F-E S-D

Proper shipping name: HEXANES

IATA

UN-No: 1208 Class: 3 Packing group: II

Proper shipping name: HEXANES

15. REGULATORY INFORMATION

This material is considered hazardous according to the classification criteria of the Hazard Classification and Communication System for Hazardous Material BE 2555.



REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Hazardous Substance Act BE2535: Regulated

Listed or exempt from listing / notification on the following chemical inventories: AICS, DSL, ENCS, IECSC, KECI, PICCS, TCSI, TSCA

16. Other Information

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