

MATERIAL SAFETY DATA SHEET

HEXANE

1. CHEMICAL IDENTITY

Chemical Name	N-Hexane		Chemical Classification	Aliphatic Hydrocarbon	
Synonyms	Gethysolve-B			Trade Name	Hexane
Formula	C ₆ H ₁₄	C.A.S. NO.	110-54-3	UN NO.	1208
Regulated Identification	Shipping Name	Hexane			
	Codes/Label	Flammable Liquid, Class 3			
	Hazardous waste I.D. No.	5			
	Hazchem Code	3 YE			
HAZARDOUS INGREDIENTS	C.A.S. NO.		HAZARDOUS INGREDIENTS	C.A.S. NO.	
1. Hexane	110-54-3				

2. PHYSICAL AND CHEMICAL DATA

Boiling Point/ Range °C	69	Physical State	Liquid	Appearance	Colourless, watery
Melting/ Freezing Point °C	-95.6	Vapour pressure @ 35 °C, mm Hg	180 mm Hg at 25°C	Odour	Gasoline like odour
Vapour Density (Air = 1)	2.97	Solubility in water @ 30 °C	Not soluble	Solubility in others	Miscible with chloroform, ether, alcohol
Specific Gravity (Water = 1)	0.659 at 20°C liquid	pH	Neutral		

3. FIRE AND EXPLOSION HAZARD DATA

Flammability	Yes	LEL (%V)	1.2%	Flash Point (OC) °C	NA
TDG Flammability	3	UEL (%V)	7.5%	Flash Point, (CC) °C	- 21.7
Auto ignition Temperature °C	225				
Explosion Sensitivity to Impact	Stable				
Explosion Sensitivity to Static Electricity	Explodes				
Hazardous Combustion products	Emits acrid smoke and fumes				
Hazardous Polymerization	Will not occur				
Combustible Liquid	Yes	Explosive Material	No	Corrosive Material	No
Flammable Material	Yes	Oxidiser	No	Others	
Pyrophoric Material	No	Organic Peroxide	No		

4. REACTIVITY DATA

Chemical Stability	Stable
Incompatibility with other material	Strong Oxidisers
Reactivity	Reacts vigorously with oxidising materials
Hazardous Reaction Products	Mixtures with dinitrogen tetroxide may explode at 28°C

5. HEALTH HAZARD DATA

Routes of Entry Effects of Exposure/ Symptoms	Inhalation Ingestion Contact	Inhalation, Ingestion, Eyes & Skin Causes irritation of respiratory tract, cough, mild depression, cardiac arrhythmia Aspiration : Causes severe lung irritation, coughing, pulmonary edema, excitement followed by depression Causes nausea, vomiting, swelling of abdomen, headache, depression. Eyes & Skin : Causes irritation
Emergency Treatment	Inhalation Ingestion Contact	Aspiration : Before bed rest, give O ₂ if needed Maintain respiration, give O ₂ if needed Do not induce vomiting Skin : Wipe of the affected area and wash with soap and water. Eyes : Wash and plenty of water for 15 min. For any type of exposure, immediately seek medical aid.

LD ₅₀ (Oral-Rat),	mg/kg	28710	LD ₅₀ ,	mg/kg	
Permissible Exposure Limit	mg/kg ppm	Not listed	Odour Threshold,	ppm mg/kg	60 210 mg/m ³
TLV (ACGIH)	ppm mg/kg	50 180	STEL,	ppm mg/kg	Not listed Not listed
NFPA Hazard Signals	Health	Flammability	Reactivity/Stability		Special
	1	3	0		

6. PREVENTIVE MEASURES

Personal Protective Equipment	Avoid contact with liquid or vapours
Handling and Storage Precautions	Provide face shield or safety goggles to protect the eyes, plastic or rubber hand gloves, eye wash facilities

7. EMERGENCY AND FIRST AID MEASURES

FIRE	Fire Extinguishing Media	CO ₂ , Dry Chemical Powder, foam, Do not use water jet.
	Special Procedure	Keep the containers cool by spraying water if exposed to heat or flame.
	Unusual Hazards	Flash back along vapour trail may occur
EXPOSURE	First Aid Measures	Inhalation: Maintain respiration, give oxygen if required. Aspiration : Before bed rest, give O ₂ if required Ingestion : Do not induce vomiting Skin : Wipe off and wash the affected area with soap & water. Eyes : Irrigate with plenty of water for 15 min. For any type of exposure, seek medical aid immediately.
	Antidotes/ Dosage	N.A.
SPILLS	Steps to be taken	Shut off leaks if without risk. Contain the leaking liquid on sand or earth. Wash the surface with water & soap.
	Waste Disposal Method	Spray into a furnace. Incineration will become easier by mixing with more flammable solvent.

8. ADDITIONAL INFORMATION/ REFERENCES

Can cause motor neuropathy in exposed workers. May be irritating to the respiratory tract and narcotic in high concentrations. Inhalation of 5000 ppm for 1/6 hrs. produces marked vertigo paresthesia in distal extremities. 2500-500 ppm produces muscle weakness, cold onset & polyneuropathy. 2000 ppm for 1/6 hrs. produces no symptoms. Dangerous if abused. An additive, permitted in food for human consumption. A very dangerous and explosion hazard when exposed to heat or flame.

9. MANUFACTURER/ SUPPLIERS DATA

Name of firm :
Mailing Address :

10. DISCLAIMER

Information contained in this material safety data sheet is believed to be reliable but no representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them.