Centre Anti-Poison pour le Québec: (800) 463-5060
Tél. (Qc): (418) 660-8666 / 800-890-8666
Fax. (Qc): (418) 660-8998

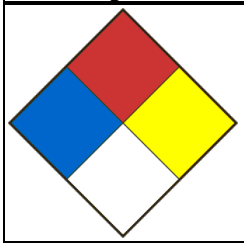
SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier HEXANES (Mix of isomers)		**Product Use** Laboratory use	
Chemical formula C_6H_{14}		**Product code** HR-0105; HP-0130; HH-0102	**Molar weight** 86,18
Chemical name / Commercial name / Synonymous HEXANE NORMAL, n-HEXANE, HEXANES			
Supplier's name Laboratoire MAT		**Address-Street** 610, Adanac Street	
City Québec		**Province** Québec	
Postal code G1C 7B7	**Internet** www.labmat.com	**Phone number** 418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666	CENTRE ANTI-POISON DU QUÉBEC 800-463-5060	
Date SDS 8/11/2020	**SDS Prepared by** Laboratoire MAT	**E-Mail** labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Flammable liquids category 2 Skin corrosion/irritation - Skin irritation category 2 Reproductive toxicity category 2 Specific target organ toxicity - Single exposure category 3 Aspiration hazard category 1 Serious eye damage/eye irritation - Eye irritation category 2 Specific Target Organ Toxicity - Repeated exposure category 1
Signal Word	DANGER
Hazards statements (H)	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 or the unborn child. H319 Causes serious eye irritation. H372 Causes damage to organs through prolonged or repeated exposure.
Precautionary statements (P)	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/lighting equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing dust / fume / gas / mist / vapours / spray. P264 Wash the areas of the body that have been in contact with the product after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. 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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P321 Specific treatment (see section 4 of the SDS and on this label). P331 Do NOT induce vomiting. P332 + P313 If skin irritation occurs: Get medical advice/attention. P337 + P313 If eye irritation persists: Get medical advice/attention. P362 + P364 Take off contaminated clothing and wash it before reuse. P370 + P378 In case of fire: Use water spray or alcohol-resistant foam, or dry powder or carbon dioxide for extinction. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company. P260 Do not breathe dust / fume / gas / mist / vapours / spray. P270 Do no eat, drink or smoke when using this product. P314 Get medical advice/attention if you feel unwell.

PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	**Health** 2 **Fire** 4 **Reactivity** 0 **Special danger**

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
n-Hexane	110-54-3	>65
Methylcyclopentane	96-37-7	5-20
3-Methylpentane	96-14-0	5-20
2-Methylpentane	107-83-5	0-10

SECTION 04 - FIRST AID MEASURES

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	If breathed in, move person into fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, give water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	Yes
Ignition conditions	Strong oxidizing agents, heat, sparks and open flame. Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Do not use a heavy water stream.
Dangerous fumes - combustion	Carbon oxides.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides.
Special fire and explosion hazards	May react violently with incompatible products (Ref Section 10).
Special protective equipment and precautions for firefighters	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnal precautions, protective equipment	Evacuate personnel to safe areas. Remove all sources of ignition. Ensure a good ventilation of the premises. When handling, wear appropriate safety equipment. Use personal protective equipment. Avoid breathing vapours, mist or gas. Use a respirator as needed. Beware of vapours accumulating to form explosive concentrations. Dispose of residues in a container provided for the disposal of hazardous materials.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry place. Keep container tightly closed and store away from heat, water, moisture, and incompatible products. Use venting and electrical equipment that is grounded and does not produce ignition sources (sparks). Protect from the sun's rays.
Methods of handling	Always open containers slowly to allow any excess pressure to vent. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Bottle in the glass only.NOTE: can attack natural rubber, some plastics or coatings. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
n-Hexane	110-54-3	TWA	50.000000 ppm 176.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Substance may be readily absorbed through intact skin			
		TWA	20.000000 ppm	Canada. British Columbia OEL
	Contributes significantly to the overall exposure by the skin route.			
	TWAEV 50.000000 ppm 176.000000 mg/m3 Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants			
	Skin (percutaneous)			
		TWA	50 ppm 176 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
	Substance may be readily absorbed through intact skin			
		TWA	20 ppm	Canada. British Columbia OEL
	Contributes significantly to the overall exposure by the skin route.			
		TWAEV	50 ppm 176 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	Skin (percutaneous)			
		TWA	50.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		TWA	50 ppm	USA. ACGIH Threshold Limit Values (TLV)
2-Methylpentane	107-83-5	TWA	500.000000 ppm 1,760.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEL	1,000.000000 ppm 3,500.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWAEV	500.000000 ppm 1,760.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEV	1,000.000000 ppm 3,500.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	200.000000 ppm	Canada. British Columbia OEL
		TWA	500.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	1,000.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
3-Methylpentane	96-14-0	STEL	1,000.000000 ppm 3,500.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	500.000000 ppm 1,760.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWAEV	500.000000 ppm 1,760.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEV	1,000.000000 ppm 3,500.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

		TWA	200.000000 ppm	Canada. British Columbia OEL
		TWA	500.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	1,000.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)

Data source	Sigma-Aldrich (Millipore Sigma)
Ventilation	Fan.
Respiratory	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Handle with gloves.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat.
Engineering control	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid.
Appearance	Clair, incolore-
Odour	Donnée non disponible.
Odour threshold	Data not available
pH	Donnée non disponible.
Melting point / Freezing point	-95.4°C
Initial boiling point	68.7°C
Boiling range	Data not available
Flash point	-22 (Coupelle fermée)°C
Evaporation rate	1.9%
Flammability	Yes
Lower flammable / Explosive limit	1.1% v/v
Upper flammable / Explosive limit	7.5% v/v
Vapour pressure	10 kPa @ 9.8 °C-
Vapour density	2.97 (Air = 1)-
Relative density	0.661@25°Cg/cm³
Solubility	Insoluble dans l'eau. Miscible avec l'alcool, le chloroforme et l'éther.
Partition coefficient water/n-octanol	0.00012-
Auto-ignition temperature	225°C
Decomposition temperature	Data not available
Viscosity	0.3mpas

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Non-reactive under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Stable under normal conditions. Vapours may form explosive mixture with air.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid contact with incompatible materials and extreme temperatures. Heat, flames, sparks.
Incompatible material	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), chlorine, diazotized tetroxide, fluorine, heat and moisture.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides.

HEXANES (MIX OF ISOMERS)

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	May cause eye irritation.
- Skin	Irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Narcotic effects, chest pain, cough, dyspnea, headache, dizziness, drowsiness, paresthesia, muscle weakness and may lead to unconsciousness.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Narcotic effects, gastrointestinal disorders, cramps, diarrhea, headache, dizziness, drowsiness, paresthesia, seizures, nausea and vomiting. Aspiration of the product into the lungs may cause chemical pneumonitis, hemorrhagic pulmonary edema resulting in rapid death from cardiac arrest, respiratory paralysis and asphyxiation.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, narcotic effects, chest pain, cough, dyspnea, headache, dizziness, confusion, irritability, somnolence, paresthesia, peripheral polyneuropathy, dysarthria, visual disturbances, weakness and muscle atrophy, loss of weight and loss of appetite, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 2,500 mg/kg. LD50 Dermal - Rabbit - > 2,000 mg/kg.
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4 h - 48000ppm

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.
Persistence and degradability	Persistence is unlikely based on information available.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its volatility.
Other adverse effects	Avoid release to the environment.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	1208
UN Proper shipping name	HEXANES
Transport hazard class(es)	3 Flammable liquids
Packing group	II
Limited quantity index	1L
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Flammable liquids category 2 Skin corrosion/irritation - Skin irritation category 2 Reproductive toxicity category 2 Specific target organ toxicity - Single exposure category 3 Aspiration hazard category 1 Serious eye damage/eye irritation - Eye irritation category 2 Specific Target Organ Toxicity - Repeated exposure category 1

SECTION 16 - OTHER INFORMATION

Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

Last Update: 8/11/2020