

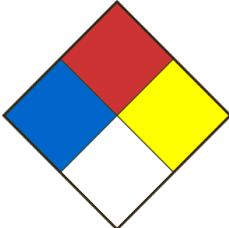


SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier L-ISOLEUCINE		Product Use Laboratory use	
Chemical formula C ₆ H ₁₃ NO ₂		Product code IU-0325	Molar weight 131,18
Chemical name / Commercial name / Synonyms L-Isoleucine, (2S,3S)-2-Amino-3-methylpentanoic acid; Ile; 2-AMINO-3-METHYLPENTANOIC ACID; ACETIC ACID, AMINO(1-METHYLPROPYL)-, (R*,R*)-; ACETIC ACID, AMINO-SEC-BUTYL-; ACIDE ALPHA-AMINO-BETA-METHYLVALERIANIQUE; ACIDE AMINO-2-METHYL-3-PENTANOIQUE; ACIDE AMINO-2-METHYL-3-VALERIQUE;			
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 Lun-Ven 8h-16h	
Emergency phone	418-660-8666 Lun-Ven 8h-16h	CENTRE ANTI-POISON DU QUÉBEC 800-463-5060	
Date SDS 7/29/2024	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Not a hazardous substance according to WHMIS 2015
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health 1 Fire 1 Reactivity 1 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%P/P)
L-Isoleucine	73-32-5	<=100

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. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, give water to drink. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Cancer. To our knowledge, the chemical, physical and toxicological properties have not been fully investigated. Ref. section 11.
Immediate medical attention and special treatment, if necessary	Treat according to symptoms. Show this sheet to the attending physician.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Data not available.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: Nitrogen oxides (NO _x). Carbon oxides.
Specific hazards of the dangerous product	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 / Personal precautions, protective equipment	Evacuate personnel to safe areas. Use personal protective equipment. Ensure adequate ventilation. Use a respirator as needed. Pick up with a shovel or broom, taking care not to scatter dust. Dispose of residues in a container provided for the disposal of hazardous materials. Do not let product enter drains.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry place. Store in a well-ventilated area. Keep container tightly closed and store away from heat, moisture and incompatible products.
Methods of handling	Always open containers slowly to allow any excess pressure to vent. Do not breathe dust. Avoid ingestion and inhalation. Avoid dust formation. Apply the usual standard hygiene rules: Wash your hands after use. Do not eat or drink during use. Wear personal protective equipment when handling. Always ensure good ventilation.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Control	Value	Basis
L-Isoleucine	73-32-5	TLV, TWA, STEL	No data available	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TLV, TWA, STEL	No data available	Canada. British Columbia OEL
		TLV, TWA, STEL	No data available	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Ventilation	Proper ventilation or hood.
Respiratory	If permitted levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.
Gloves	Handle with gloves. Suggested material: Nitrile. The type, thickness and length of the glove must be chosen according to the use, the concentration of the product, as well as the duration of use. Replace gloves regularly for better protection.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
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	Solid.
Appearance	Poudre cristalline de couleur blanc à blanc cassé-
Odour	inodore.
Odour threshold	Data not available
pH	5.5 - 6.5 à 40 g/l à 20 °C (68 °F).
Melting point / Freezing point	283 - 286 °C-
Initial boiling point	Sublime à 168-170 °C-
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	0.00000001 mmHg
Vapour density	Data not available
Relative density	1.207 gcm ³ à 20 °C (68 °F)-
Solubility	Solubilité dans l'eau (g/L) : 18,3 à 0 °C ; 22,3 à 25 °C ; 30,3 à 50 °C ; 46,1 à 75 °C ; 78,0 à 100 °C. Dans l'eau, 3,44X10 ⁻⁴ mg/L à 25 °C. Peu soluble dans l'alcool chaud (0,13 % poids/poids à 80 °C), l'acide acétique chaud. Insoluble dans l'éther..
Partition coefficient water/n-octanol	Log Kow (Log Pow) -1.72 @ 25 °C-
Auto-ignition temperature	> 475 °C (> 887 °F)-
Decomposition temperature	292°C
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Fine dusts of organic materials have the potential to form a combustible or explosive mixture with air if confined in a small space and subjected to an ignition source. May react violently with incompatible substances.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	May form combustible dust concentrations in the air.
Conditions to avoid, including static discharge, shock or vibration	Avoid dust formation. Exposure to light. Avoid contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Nitrogen oxides (NO _x), Carbon monoxide (CO), Carbon dioxide (CO ₂)

SECTION 11 - TOXICOLOGICAL INFORMATION

L-ISOLEUCINE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	May cause eye irritation. To our knowledge, the product has not been fully studied.
- Skin	May cause skin irritation. To our knowledge, the product has not been fully studied.
- Inhalation	May cause respiratory tract irritation. To our knowledge, the product has not been fully studied.
Acute toxicity (Ingestion)	To our knowledge, the product has not been fully studied.
Chronic exposure effects / symptoms	To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
DL50 (specify species and route of entry)	LD50 Oral - Rat - female - > 2,000 mg/kg LD50 Dermal - Data not available.
CL50 (specify species and route of entry)	CL50 inhalation - Rat > 5410 mg/m ³ - 4 h LC50 Inhalation - Rat - male and female - 4 h - > 5.4 mg/l - aerosol

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish: Semi-static test LC50 - Danio rerio (zebrafish) - > 10,000 mg/l - 96 h Toxicity to algae: Static test CE50r - Scenedesmus capricornutum (water algae sweet) - > 10,000 mg/l - 71.5 h Do not throw residues in the sewer.
Persistence and degradability	Soluble in water. Persistence is unlikely based on information provided.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	Data not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	N/R
UN Proper shipping name	
Transport hazard class(es)	
Packing group	
Limited quantity index	
ERAP Index	
Special precautions	

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Not a hazardous substance according to WHMIS 2015
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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.

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