

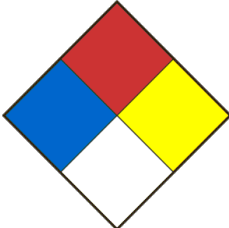


## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier L-VALINE		Product Use Laboratory use	
Chemical formula <chem>C5H11NO2</chem>		Product code VR-0106	Molar weight 117,15
Chemical name / Commercial name / Synonymous L-Valine; Valine, L-2-Amino-3-methylbutyric acid; Val, Acide (S)-amino-2-méthyl-3-butanoïque; Acide butanoïque, amino-2-méthyl-3-, (S)-; Acide L(+)-alpha-aminoisovalérinique; Acide L(+)-amino-2-isovalérique; Acide L(+)-amino-2-méthyl-3-butyrique;			
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 7/30/2024	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)
	<b>Health</b> 1 <b>Fire</b> 1 <b>Reactivity</b> 0 <b>Special danger</b>

### SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%P/P)
L-Valine	72-18-4	<=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: Skin, eye and respiratory system irritation. 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.
General advice	Show this safety data sheet to the doctor in attendance.

## SECTION 05 - FIREFIGHTING MEASURES

<b>Flammability</b>	No
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Data not available.
<b>Hazardous combustion products</b>	Hazardous combustion products formed under fire conditions: Nitrogen Oxides (NO <sub>x</sub> ), Carbon Monoxide (CO), Carbon Dioxide (CO <sub>2</sub> ), Ammonia.
<b>Specific hazards of the dangerous product</b>	Keep product and empty containers away from heat and sources of ignition. May react violently with incompatible products (Ref Section 10).
<b>Special protective equipment and precautions for firefighters</b>	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

<b>Methods and materials for containment and cleaning up / Personal precautions, protective equipment</b>	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

<b>Conditions for safe storage</b>	Store in a dry, cool and well-ventilated place. Store between 15 to 30°C Keep container tightly closed and store away from heat, moisture, and incompatible products.
<b>Methods of handling</b>	Avoid contact with the skin, eyes and clothes. Avoid ingestion and inhalation. Avoid dust formation. Wear personal protective equipment when handling. Always ensure good ventilation. Apply the usual standard hygiene rules: Wash your hands after use. Do not eat or drink during use.

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace control parameters

Components	CAS-No.	Control	Value	Basis
L-Valine	72-18-4	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

<b>Ventilation</b>	Use fan.
<b>Respiratory</b>	If permitted levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.
<b>Gloves</b>	Handle with gloves. Suggested material: Nitrile. Butyle. Neoprene. 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.
<b>Eyes</b>	Safety goggles with safety shutters.
<b>Shoes</b>	Safety shoes.
<b>Clothing</b>	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Engineering control</b>	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 blanche.-
Odour	Inodore.
Odour threshold	Data not available
pH	Donnée non disponible.
Melting point / Freezing point	315°C
Initial boiling point	Data not available
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	0.00000003mmHg
Vapour density	Data not available
Relative density	1.23 @ 20 °C-
Solubility	88.5 g/l à 25 °C (77 °F) - Complètement soluble dans l'eau. Insoluble dans les solvants neutres courants. Très légèrement soluble dans l'alcool; insoluble dans l'éther..
Partition coefficient water/n-octanol	Log Kow (Log Pow) -2.26 @ 20 °C-
Auto-ignition temperature	Data not available
Decomposition temperature	293°C
Viscosity	Data not available

## SECTION 10 - STABILITY AND REACTIVITY

Reactivity	May react violently with incompatible substances. 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.
Chemical stability	Stable under recommended storage conditions. Sublimates with heat, with partial decomposition.
Possibility of hazardous reactions	May form combustible dust concentrations in the air.
Conditions to avoid, including static discharge, shock or vibration	Avoid dust formation. Avoid contact with incompatible materials. Avoid excessive heat.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

## SECTION 11 - TOXICOLOGICAL INFORMATION

### L-VALINE

Routes of exposure	Ingestion. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	May cause eye irritation. To our knowledge, the product has not been fully studied.
- Skin	To our knowledge, the product has not been fully studied. May cause skin irritation.
- 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)	LC50 Inhalation - Rat - and male female - 4 h - > 5,260 mg/m3

## SECTION 12 - ECOLOGICAL INFORMATION

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

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## SECTION 14 - TRANSPORT INFORMATION

<b>UN Number</b>	NR
<b>UN Proper shipping name</b>	
<b>Transport hazard class(es)</b>	
<b>Packing group</b>	
<b>Limited quantity index</b>	
<b>ERAP Index</b>	
<b>Special precautions</b>	

## SECTION 15 - REGULATORY INFORMATION

<b>WHIMS CANADA</b>	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.

Last Update: 7/30/2024