



Centre Anti-Poison pour le Québec: (800) 463-5060
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SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier ADIPIC ACID		Product Use Laboratory use	
Chemical formula HO ₂ C(CH ₂) ₄ CO ₂ H		Product code AR-0109	Molar weight 146,14
Chemical name / Commercial name / Synonymous ADIPIC ACID, ACIDE HEXANEDIOÏQUE, HEXANEDIOIC ACID, 1,4-BUTANEDICARBOXYLIC ACID, ACIFLOCTIN, ACINETTEN, ADILACTETTEN, ADIPINIC ACID			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
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Emergency phone	CANUTEC: 613-996-6666	CENTRE ANTI-POISON DU QUÉBEC 800-463-5060	
Date SDS 12/6/2022	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Serious eye damage/ Eye irritation category 2A
Signal Word	WARNING
Hazards statements (H)	H319 Causes serious eye irritation.
Precautionary statements (P)	P264 Wash the areas of the body that have been in contact with the product after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/attention.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health 2 Fire 1 Reactivity 0 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Acide adipique	124-04-9	<=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, rinse the mouth with water. 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: Headaches. Nausea and vomiting. Skin, eye and respiratory system irritation. Breathing difficulties. 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	No
Ignition conditions	Non flammable.
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: Carbon oxides.
Special fire and explosion hazards	This product in high concentration in the air is able to create a dust explosion. 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. Ensure adequate ventilation. Use personal protective equipment. 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	Keep container tightly closed in a dry and well-ventilated place. Keep container tightly closed and store away from oxidizing agents, heat, moisture and incompatible products.
Methods of handling	Avoid contact with the skin, eyes and clothes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Avoid ingestion and inhalation. 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.	Control	Value	Basis
ADIPIC ACID	124-04-9	TWA	5 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	5 mg/m ³	Canada. British Columbia OEL
		VEMP	5 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Data source	Sigma-Aldrich.
Ventilation	Use 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. 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	Cristalline blanche.
Odour	inodore.
Odour threshold	Data not available
pH	Solution aqueuse saturée à 25°C = pH 2.7 ; Solution aqueuse 0.1% = pH 3.2.
Melting point / Freezing point	151-154°C
Initial boiling point	265 °C à 100 mmHg°C
Boiling range	Data not available
Flash point	196°C
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	0.097 hPa à 18.5 °C.
Vapour density	5.04 (Air = 1).
Relative density	1.36g/cm ³
Solubility	Soluble dans l'eau, l'alcool et l'acétone.
Partition coefficient water/n-octanol	log Pow: 0.081 à 25 °C-
Auto-ignition temperature	420°C
Decomposition temperature	338°C
Viscosity	4.54 cP at 160°C.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Acid product, reacts strongly with strong bases. May react violently with incompatible substances.
Chemical stability	Stable under recommended storage conditions. This product is unstable under the following conditions: When heated strongly, it gives off vapors of valeric acid.
Possibility of hazardous reactions	May react violently with incompatible substances.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid excessive heat. Avoid dust formation. Avoid contact with incompatible materials.
Incompatible material	Oxidizing agents (eg nitric acid), reducing agents, bases, heat and moisture.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

ADIPIC ACID

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation and may result in inflammation of the conjunctiva.
- Skin	Irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Nervous disorders, cough, dyspnea, dizziness, headache, nausea and vomiting.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Nervous disorders, gastrointestinal disorders, cramps, diarrhea, dizziness, headache, seizures, nausea and vomiting.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, nervous disorders, chest pain, cough, dyspnoea, laryngitis, headache, dizziness, tiredness, loss of appetite, convulsions, nausea and vomiting.
LD50 (specify species and route of entry)	LD50 Oral - Rat - Male et female - 5560 mg/kg. LD50 Dermal - Rabbit - Male et female - > 7,940 mg / kg - Remarks: (40% solution).
CL50 (specify species and route of entry)	CL50 inhalation - Rat Male et female - 7.7 mg/L - 4 h.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	LC50 - Pimephales promelas (fathead minnow) - 97 mg/L - 4 h. LC50 - Leuciscus idus (Golden orfe) - 230 mg/L - 96 h. EC50 - Daphnia magna (Water flea) - 46 mg/L - 48 h. CE50 - Pseudomonas putida (Bacille Pseudomonas putida) - 92 mg/L - 17 h. CE50- activated sludge Static test: 7911 mg/L - 3 h.
Persistence and degradability	Data not available.
Bioaccumulative potential	Data not available.
Mobility in soil	Soluble in water. Probable mobility in the environment due to its solubility in water.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of contents / container in accordance with local / regional / national / international 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	Serious eye damage/ Eye irritation category 2A
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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: 12/6/2022