

Sarg. Welch

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Scholar[™] Chemistry

MATERIAL SAFETY DATA SHEET

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MSDS No. 9442904 9442906
Effective Date: December 23, 2002

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	Adipic Acid <i>Crystals</i>
Chemical Synonyms	N/A
Formula	HO ₂ C(CH ₂) ₄ CO ₂ H
CAS No.	124-04-9

416-984-3000

NFPA

1	0	2
1	0	0

HAZARD RATING

0	1	2	3	4
0	1	2	3	4

WHMIS

0	1	2	3	4
0	1	2	3	4

EXTREME

SECTION II DANGEROUS INGREDIENTS

Name	Adipic Acid	%	>99.9%	TLV Units	5 mg/m ³
WARNING!					

SECTION III PHYSICAL DATA

Melting Point (°C)	152°C	Specific Gravity (H ₂ O = 1)	1.34 @ 18°C
Boiling Point (°C)	330°C decomposes.	Percent Volatile by Volume (%)	0.0% @ 20°C
Vapor Pressure (mm Hg)	0.106 m mg @ 25°C	Evaporation Rate (=1)	Not applicable.
Vapor Density (Air=1)	5.04		
Solubility in Water	2.5 W% @ 25°C		
Appearance & Odor	White crystalline powder, no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash point	196°C TCC	Flammable Limits in Air % by Volume	N/A
Firefighting Procedures	Use dry chemical, CO ₂ , alcohol foam, or water spray. In fire conditions, fire-fighters should wear an appropriate mask or a self-containing breathing apparatus.		
Flammability and Explosion Hazards	Adipic acid becomes corrosive in contact with water. Water may cause frothing. Auto-ignition temperature: 420°C		

TDG Not controlled under TDG.

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SECTION V REACTIVITY DATA

Chemical Stability	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	If no...under what conditions?
Incompatible with Other products	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Strong oxidizers such as perchloric acid and nitric acid.

Hazardous Decomposition Products: May emit toxic/hazardous gases upon thermal decomposition.

Reactive under what conditions: Adipic acid becomes corrosive in contact with water.

SECTION VI TOXICOLOGICAL PROPERTIES

Route of Entry	Inhalation. Ingestion. Eyes.
TLV	5 mg/m ³
Toxicity for animals	LD50: 1,900 mg/kg oral-mouse LD50: 1,000 mg/kg oral-rat
Chronic effects on humans	Repeated or prolonged exposure to the substance can produce target organ damage. Target organs: None known.
Acute effects on humans	May cause eye, skin and mucous membrane irritation.

SECTION VII PREVENTIVE MEASURES

Waste Disposal	Discharge, treatment, or disposal may be subject to local laws. Consult your local or regional authorities.
Storage	Keep in a cool, well ventilated place. Keep container tightly closed. Keep away from incompatible materials. Keep away from heat, sources of ignition.
Precautions	Avoid contact with skin and eyes. DO NOT breathe dust. DO NOT ingest. If ingested, seek medical advice immediately.
Spill or leak	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Protective Clothing	Safety glasses, lab coat, dust respirator, gloves.

SECTION VIII FIRST AID MEASURES

Specific first aid measures

Eye contact: Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention. Skin contact: If the chemical touches the victim's exposed skin, such as the hands: Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Inhalation: Move victim to fresh air. If not breathing, give artificial respiration. Allow victim to rest in a well ventilated area. Seek immediate medical attention. Ingestion: Do NOT induce vomiting. Have conscious person drink several glasses of water or milk. Seek immediate medical attention.

SECTION IX PREPARATION OF THE MSDS

Rev. No.	2	Date	December 23, 2002	Approved	Michael Raszeja
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