



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.
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MSDS No. SS 1015
Effective Date May 14, 1999

SECTION V HEALTH HAZARD DATA

SS 1015

Threshold Limited Value

None established for this material by (ACGIH 1992-93).
Toxicity Data: Acute orl-rat LD50: 2260 mg/kg.

Effects of Overexposure

INHALATION: May cause upper respiratory tract irritation. **EYES:** Causes irritation. Possible risk of serious damage. **SKIN:** May cause irritation. Exercise appropriate procedures to minimize potential hazards. **INGESTION:** Slightly toxic by ingestion. May cause mucous membrane irritation.

Emergency and First Aid Procedures

INGESTION: If swallowed, if conscious, Do not induce vomiting. Give one or two glasses of water to drink. Call physician immediately. Never give anything by mouth to an unconscious person. **SKIN:** Flush with water, follow by washing with mild soap and water. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting lower and upper eyelids occasionally. If irritation develops or persists, get medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Moisture. Excessive temperature and heat.
	Stable	X		

Incompatibility (Materials to Avoid)	Strong oxidizing materials, reducing agents, bases.
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Hazardous Decomposition Products	Thermal decomposition or burning emits smoke, carbon dioxide and/or carbon monoxide.
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Hazardous Polymerization		Conditions to Avoid	Not applicable.
May Occur	Will Not Occur		
	X		

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Using proper ventilation and protective equipment collect in a manner that will not create dust. Place material in a suitable container for disposal. Wash spill area with soap and water.
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Waste Disposal Method	Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.		
	Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator.		

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None should be needed in normal laboratory handling. If dusty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved dust mask.		
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Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment	Lab coat, proper gloves, safety shower, eye wash station, ventilation hood.
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SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, dry place away from oxidizing materials. Hygroscopic. Protect from moisture. Wash thoroughly after handling.
Keep container tightly closed when not in use.	


Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals.
Use with adequate ventilation. Avoid breathing dust. Avoid contact with eyes, skin and clothing. Remove and wash contaminated clothing.	

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision	No. 3	Date	5/14/99	Approved	Michael Raszeja	Chemical Safety Coordinator	MR
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The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	SUCCINIC ACID	<div><div><div><div>CHEMTREC 800-424-9300 Day 716-226-6177</div><div><div>NFPA HAZARD RATING</div><div><div>LEAST 0</div><div>SLIGHT 1</div><div>MODERATE 2</div><div>HIGH 3</div><div>EXTREME 4</div></div></div></div><div><div>HMIS *</div><table><tr><td>Health</td><td>1</td></tr><tr><td>Fire</td><td>1</td></tr><tr><td>Reactivity</td><td>1</td></tr></table></div></div></div>	Health	1	Fire	1	Reactivity	1
Health	1							
Fire	1							
Reactivity	1							
Chemical Synonyms	1,4-Butanedioic acid							
Formula	C ₄ H ₆ O ₄							
Unit Size	up to 2.5 Kg.							
C.A.S. No.	110-15-6							

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Succinic acid	100%	None established.

WARNING! CAUSES IRRITATION.

MAY BE HARMFUL IF INHALED OR INGESTED.

SECTION III PHYSICAL DATA

Melting Point (°F)	185-190°C (365-374°F)	Specific Gravity (H ₂ O = 1)	No data available.
Boiling Point (°F)	235°C (455°F)	Percent Volatile by Volume (%)	N/A
Vapor Pressure (mm Hg)	N/A	Evaporation Rate (\approx 1)	N/A
Vapor Density (Air=1)	N/A		
Solubility in Water	6.8 grams dissolves in 100 mL water @ 20°C.		
Appearance & Odor	White crystalline granules; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable.	Flammable Limits in Air % by Volume	Unknown	Lower	Upper
Extinguisher Media	Use suitable media to extinguish the supporting or surrounding fire.				

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Slight fire hazard when exposed to heat or flame.
Fire or excessive heat may produce hazardous
decomposition products, can react with oxidizing materials.

D.O.T. NON-REGULATED.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20