

# **Material Safety Data Sheet**

# Succinic Anhydride

#### Section 1 - Chemical Product

MSDS Name: Succinic Anhydride(pharma grade)

Synonym: SAA

#### Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
108-30-5	Succinic Anhydride	≥99.5	203-570-0

Hazard Symbols: XI Risk Phrases: 36/37

# Section 3 - HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW** 

Irritating to eyes and respiratory system.

Potential Health Effects

Eye:

Causes eye irritation.

Skin:

Causes skin irritation.

Ingestion:

May cause irritation of the digestive tract. May be harmful if swallowed.

Inhalation:

Causes respiratory tract irritation. May cause allergic respiratory reaction.

Chronic:

May cause cancer according to animal studies.

## Section 4 - FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid if irritation develops or persists. Wash clothing before reuse. Flush skin with plenty of soap and water.

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

# Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

# Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8. Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section.

Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions.

Provide ventilation.

#### Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage:

Store in a cool, dry place. Keep container closed when not in use.

# Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

**Engineering Controls:** 

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Exposure Limits CAS# 108-30-5: Personal Protective Equipment Eyes: Wear safety glasses and chemical goggles if splashing is possible.

Skin:

Wear appropriate gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to minimize contact with skin.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Color: white

Odor: None reported. pH: Not available.

Vapor Pressure: 1 mmHg @ 92 C

Viscosity: 3 cP 125 C Boiling Point: 261 deg C

Freezing/Melting Point: 117.3-119.4 deg C Autoignition Temperature: Not available.

Flash Point: Not available.

Explosion Limits, lower: Not available. Explosion Limits, upper: Not available.

**Decomposition Temperature:** 

Solubility in water: 20 g/l (20 C) (decomposes)

Specific Gravity/Density: Molecular Formula: C4H4O3 Molecular Weight: 100.0262

# Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, dust generation, excess heat, strong oxidants.

Incompatibilities with Other Materials:

Strong oxidizing agents, acids, bases, alcohols, amines, moist air or water.

Hazardous Decomposition Products:

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported.

#### Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 108-30-5: WN0875000 LD50/LC50:

CAS# 108-30-5: Draize test, rabbit, eye: 750 ug Severe; Oral, rat: LD50 = 1510 mg/kg.

Carcinogenicity:

Succinic Anhydride - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

#### Section 12 - ECOLOGICAL INFORMATION

#### Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14 - TRANSPORT INFORMATION

IATA

Not regulated as a hazardous material.

MO

Not regulated as a hazardous material.

RID/ADR

Not regulated as a hazardous material.

# Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 36/37 Irritating to eyes and respiratory system.

Safety Phrases:

S 25 Avoid contact with eyes.