

SAFETY DATA SHEET

SUCCINIC ANHYDRIDE

SECTION 1: Identification of the substance/mixture and of the company/undertaking Trade name:

1.1 Product identifier:	
CAS Number:	108-30-5
EC number:	203-570-0
1.2 SYNONYMS:	• Butanedioic anhydride • Succinic acid anhydride • Butanetricarboxylic acid anhydride • Succinic acid cyclic anhydride

SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:	Classification according to Regulation (EC) No 1272/2008 The substance is not classified according to the CLP regulation.
2.2 Label elements:	Labelling according to Regulation (EC) No 1272/2008 Skin Corrosion/Irritation (Category 1B) Serious Eye Damage/Eye Irritation (Category 1) Skin Sensitization (Category 1)
Hazard Pictograms:	
Signal Word:	Danger
Hazard statements:	H314: Causes severe skin burns and eye damage. H317: May cause an allergic skin reaction.
Precautionary Statements:	P280: Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

	P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352: IF ON SKIN: Wash with plenty of soap and water.
2.3 Other hazards:	
Inhalation:	may cause respiratory irritation, dizziness, nausea, and headaches.
Ingestion:	may cause gastrointestinal irritation, nausea, vomiting, abdominal pain,
Skin Contact:	can cause severe irritation, burns, or tissue damage, and may lead to an allergic skin reaction upon prolonged or repeated exposure.
Eye contact:	can cause severe irritation, redness, pain, and potential eye damage.
Chronic Exposure:	may lead to persistent skin sensitization, resulting in allergic reactions upon repeated contact, and potentially cause long-term respiratory issues or eye damage.
Aggravation of pre-existing conditions:	may lead to persistent skin sensitization, resulting in allergic reactions upon repeated contact, and potentially cause long-term respiratory issues or eye damage.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation:	Substances
CAS No:	Description: 108-30-5 SUCCINIC ANHYDRIDE
Identification number(s):	EC number: 203-570-0

SECTION 4: First aid measures

4.1 Description of first aid measures	
General information:	

After inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician
After skin contact:	Remove contaminated clothing. Wash with plenty of soap and water. Consult a physician.
After eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. consult a physician.
After swallowing:	Rinse mouth with water. Immediately after ingestion. Never give anything by mouth to an unconscious person. Do not induce vomiting. Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed:	acute symptoms such as acute skin burns, eye damage, respiratory irritation, and gastrointestinal discomfort from ingestion, while delayed effects may include allergic skin reactions and worsening respiratory conditions.
4.3 Indication of any immediate medical attention and special treatment needed:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media:	Carbon dioxide. Water spray. Alcohol-resistant foam. dry chemical.
5.2 Special hazards arising from the substance or mixture:	Formation of explosive dust/air mixtures is possible. In case of fire, carbon monoxide can be formed.
5.3 Advice for firefighters:	Wear fully protective suit, safety glasses and respiratory device. Cool tanks/drums with water spray/remove them into safety.
5.4 further information:	no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Avoid dust accumulation. Seek medical attention.
6.2 Environmental precautions:	Do not enter this chemical into drains.
6.3 Methods and material for containment and cleaning up:	Take up spill into absorbent material, e.g.: sand, earth, vermiculite, powdered limestone. Scoop absorbed substance into closing containers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:	For use in are with adequate ventilation. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material Do not use in confined spaces. Electrostatic discharge protection. Minimize dust generation and accumulation. Avoid ingestion and inhalation. Avoid contact with eyes, skin, and clothing.
7.2 Conditions for safe storage, including any incompatibilities:	Store in original containers. Keep containers securely sealed Store in a cool, dry, well-ventilated area.

	Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Store in a dry and dark area.
Requirements to be met by storerooms and receptacles:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end uses:	no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters	
Additional information about design of technical facilities:	A system of local and general exhaust is recommended.
8.2 Exposure controls	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment:	Dust respirator, protective masks, wearing anti chemical gloves, rubber gloves, etc.
General protective and hygienic measures:	Eyes, body and hand protection, maintain indoor air unobstructed. Wear protective equipment.
	Respiratory protection: Required.
Protection of hands:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws. Wash and dry hands.
	Eye protection: Required

Protection of Body:	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.
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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties	
General Information	
Appearance: Form:	Crystalline Solid
Colour:	White
Odour:	Mild, pungent odor
pH-value:	Not applicable
Melting point/Melting range:	120°C
Boiling point/Boiling range:	240°C
Flammability (solid, gaseous):	Flammable
Ignition temperature:	300°C
Decomposition temperature:	250°C
Self-igniting:	Not applicable
Flash point:	105°C
Danger of explosion:	Not applicable
Explosion limits: Lower:	No data available
Explosion limits: Upper:	No data available
Vapour pressure:	No data available
Density at 20 °C:	1.56 g/cm ³ .
Relative density:	1.56
Vapour density:	Not applicable
Evaporation rate:	Not applicable
Solubility in / Miscibility with- water at 20 °C:	Slightly soluble
Partition coefficient:(n- octanol/water)	0.63
Viscosity:	Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity	No data available
10.2 Chemical stability	This chemical is stable under storage conditions.
10.3 Possibility of hazardous reactions	No dangerous reactions known.

10.4 Conditions to avoid	Incompatible materials, dust generation, excess heat, strong oxidants.
10.5 Incompatible materials	Strong oxidizing agents, acids, bases, alcohols, amines, moist air or water
10.6 Hazardous decomposition products	Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute Toxicity:	LD50 (Oral, Rat) : 1510 mg/kg LD50 (Dermal, Rabbit) : no data available LC50 (Inhalation Rat) : no data available
Skin corrosion/Irritation:	Can cause severe skin irritation.
Serious eye damage/irritation:	Causes serious eye irritation.
Respiratory damage/irritation:	No data available
Ingestion:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Specific target organ toxicity - single exposure:	No data available
Specific target organ toxicity - repeated exposure:	No data available
Aspiration hazard:	No data available
Signs and Symptoms of Exposure:	Refer section 2.3
11.2 Additional toxicological information	
Biodegradability:	readily biodegradable

SECTION 12: Ecological information

12.1 Toxicity Aquatic toxicity:	LC50(fish): no data available (96hr) EC50(daphnia): no data available(48hr) EC50(algae): no data available(72hr)
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12.2 Persistence and degradability:	readily biodegradable
12.3 Bioaccumulative potential:	Low bioaccumulative.
12.4 Mobility in soil:	High
12.5 Other adverse effects:	No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Uncleaned packaging Recommendation:	dispose of in accordance with local hazardous waste regulations
Recommended cleansing agents:	Water, Sodium bicarbonate or Sodium hydroxide.

SECTION 14: Transport information

14.1 UN-Number · ADR, ADN, IMDG, IATA:	3265
14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:	SUCCINIC ANHYDRIDE
14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA :	8
14.4 Packing group · ADR, IMDG, IATA:	II
14.5 Environmental hazards:	Not classified
14.6 Special precautions for user:	Handle responsibly.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU	Directive 2012/18/EU, under that this substance is not classified in listed substance.
Named dangerous substances:	This substance is not listed in the annex 1 to the directive.
15.2 Chemical safety assessment:	Chemical assessment has not been carried out

SECTION 16: Other information

The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.