


# SAFETY DATA SHEET

## SORBIC ACID

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

<b>1.1 Product identifier:</b>	
<b>CAS Number:</b>	110-44-1
<b>EC number:</b>	204-643-4.
<b>1.2 SYNONYMS</b>	<ul style="list-style-type: none"> <li>• 2,4-Hexadienoic acid</li> <li>• (E,E)-2,4-Hexadienoic acid</li> <li>• Hexa-2,4-dienoic acid</li> <li>• Trans,trans-2,4-Hexadienoic acid</li> <li>• Sorbistat</li> </ul>

### SECTION 2: Hazards identification:

<b>2.1 Classification of the substance or mixture:</b>	Classification according to Regulation (EC) No 1272/2008 The substance is classified according to the CLP regulation.
<b>2.2 Label elements:</b>	Labelling according to Regulation (EC) No 1272/2008 <ul style="list-style-type: none"> <li>• Skin corrosion/irritation (Category 2)</li> <li>• Serious eye damage/eye irritation (Category 2)</li> <li>• Specific target organ toxicity (single exposure) (Category 3)</li> </ul>
<b>Hazard Pictograms:</b>	
<b>Signal Word:</b>	Danger
<b>Hazard statements:</b>	<b>H319:</b> Cause serious eye irritation <b>H335:</b> May cause respiratory irritation <b>H315:</b> Cause skin irritation
<b>Precautionary Statements:</b>	<b>P261:</b> Avoid breathing dust/fume/gas/mist/vapours/spray. <b>P280:</b> Wear protective gloves/protective clothing/eye protection/face protection

	<p><b>P305 + P351 + P338:</b> IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing</p> <p><b>P337 + P313:</b> If eye irritation persists: Get medical attention</p> <p><b>P403 + P233:</b> Store in a well-ventilated place. Keep container tightly closed</p> <p><b>P501:</b> Dispose of contents/ container to an approved waste disposal plant</p>
<b>2.3 Other hazards:</b>	Dust forms explosive mixtures with air.
<b>Inhalation:</b>	can cause respiratory irritation, coughing, sneezing and sore throat.
<b>Ingestion:</b>	can cause severe gastrointestinal irritation, nausea, vomiting, and abdominal pain.
<b>Skin Contact:</b>	can cause severe burns, irritation, and allergic reactions,
<b>Eye contact:</b>	May cause irritation, redness, pain and burning sensation.
<b>Chronic Exposure:</b>	may lead to long-term skin or respiratory irritation, sensitization, or damage to the lungs, liver, and other organs, depending on the level and duration of exposure.
<b>Aggravation of pre-existing conditions :</b>	may aggravate pre-existing respiratory conditions, such as asthma or chronic obstructive pulmonary disease (COPD), and skin conditions like dermatitis.

### SECTION 3: Composition/information on ingredients

<b>3.1 Chemical characterisation:</b>	Substances
<b>CAS No:</b>	Description: 110-44-1 SORBIC ACID
<b>Identification number(s):</b>	EC number: 204-634-4

## SECTION 4: First aid measures

<b>4.1 Description of first aid measures</b>	
<b>General information:</b>	
<b>After inhalation:</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician
<b>After skin contact:</b>	Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes. Consult a physician.
<b>After eye contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>After swallowing:</b>	Gargle, drink plenty of water Never give anything by mouth to an unconscious person. Consult a physician.
<b>4.2 Most important symptoms and effects, both acute and delayed:</b>	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
<b>4.3 Indication of any immediate medical attention and special treatment needed:</b>	Treat symptomatically. Symptoms may be delayed.

## SECTION 5: Firefighting measures

<b>5.1 Extinguishing media</b>	Dry chemical, carbon dioxide, water spray, alcohol-resistant foam.
<b>5.2 Special hazards arising from the substance or mixture</b>	Containers may explode when heated. Thermal decomposition can lead to release of irritating and toxic gases and vapors
<b>5.3 Advice for firefighters</b>	Wear fully protective suit, safety glasses and respiratory device . Do not use a solid water stream as it may scatter or spread fire.
<b>5.4 further information</b>	Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>	<p>Evacuate personnel to safe areas</p> <p>Ensure adequate ventilation, especially in confined areas</p> <p>ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area)</p> <p>Avoid contact with skin, eyes or clothing</p> <p>Contaminated work clothing should not be allowed out of the workplace</p> <p>Avoid generation of dust</p> <p>Do not breathe dust</p> <p>Use personal protection recommended in Section 8</p> <p>Wash thoroughly after handling</p>
<b>6.2 Environmental precautions:</b>	<p>Prevent further leakage or spillage if safe to do so. Do not let product enter drains.</p>
<b>6.3 Methods and material for containment and cleaning up:</b>	<p>Use protective equipment while cleaning if necessary.</p> <p>Avoid dust formation.</p> <p>Dust formation that cannot be avoided must be collected regularly.</p> <p>Use tested industrial vacuum cleaners or suction systems for areas with a high risk of explosion.</p> <p>Do not raise dust while cleaning.</p> <p>Use of a blower for cleaning is not permitted.</p>

## SECTION 7: Handling and storage

<b>7.1 Precautions for safe handling</b>	<p>Take care to maintain clean working place.</p> <p>Do not leave container open.</p> <p>Sufficient ventilation must be guaranteed for refilling, transfer, or open use.</p> <p>Avoid spillage.</p> <p>Fill only into labelled container.</p> <p>Avoid rising dust.</p>
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<b>7.2 Conditions for safe storage, including any incompatibilities</b>	Do not use any food containers - risk of mistake. Containers have to be labelled clearly and permanently. Store in the original container as much as possible. Keep container tightly closed. Recommended storage at room temperature. Store in a dry place
<b>Requirements to be met by storerooms and receptacles:</b>	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.
<b>7.3 Specific end uses</b>	<b>Recommended use:</b> Food additives

## SECTION 8: Exposure controls/personal protection

<b>8.1 Control parameters</b>	
<b>Additional information about design of technical facilities:</b>	A system of local and general exhaust is recommended
<b>8.2 Exposure controls</b>	
<b>Appropriate engineering controls</b>	Handle in accordance with good industrial hygiene and safety practice. Eye bath required. These locations must be signposted Clearly Wash hands before breaks and at the end of workday.
<b>Personal protective equipment:</b>	Dust respirator, protective masks, wearing anti chemical gloves, rubber gloves, etc.
<b>General protective and hygienic measures:</b>	Eyes, body and hand protection, maintain indoor air unobstructed. Wear protective equipment.
	<b>Respiratory protection:</b> Required.
<b>Protection of hands:</b>	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 and good laboratory practices. Check the tightness before wear. Wash and dry hands. The following materials are suitable for protective gloves: Nitrile rubber/Nitrile latex - NBR Layer strength 0,11 mm , break-through time > 480 min
	<b>Eye protection:</b> Required
<b>Protection of Body:</b>	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.

## SECTION 9: Physical and chemical properties

<b>9.1 Information on basic physical and chemical properties</b> <b>General Information</b>	
<b>Appearance: Form:</b>	Powder
<b>Colour:</b>	White
<b>Odour:</b>	Faint
<b>pH-value:</b>	3.3
<b>Melting point/Melting range:</b>	134°C
<b>Boiling point/Boiling range:</b>	The substance decomposes when heated.
<b>Flammability (solid, gaseous):</b>	Combustible solid
<b>Ignition temperature:</b>	415°C
<b>Decomposition temperature:</b>	190°C
<b>Self-igniting:</b>	No data available
<b>Flash point:</b>	125°C
<b>Danger of explosion:</b>	Not applicable
<b>Explosion limits: Lower:</b>	No data available
<b>Explosion limits: Upper:</b>	No data available
<b>Vapour pressure:</b>	No data available
<b>Density at 20 °C:</b>	1.2 g/cm <sup>3</sup>
<b>Relative density:</b>	1.2
<b>Vapour density:</b>	3.87
<b>Evaporation rate:</b>	No data available
<b>Solubility in / Miscibility with- water at 20 °C:</b>	1.6g/l (20°C)

<b>Partition coefficient:(n-octanol/water)</b>	1.33
<b>Viscosity:</b>	No data available
<b>Explosive properties:</b>	Dust forms explosive mixtures with air

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	No data available
<b>10.2 Chemical stability</b>	Stable under normal conditions.
<b>10.3 Possibility of hazardous reactions</b>	Dust forms explosive mixtures with air.
<b>10.4 Conditions to avoid</b>	Light, air. Heat, flames and sparks
<b>10.5 Incompatible materials</b>	Bases, Oxidizing agents, Reducing agents.
<b>10.6 Hazardous decomposition products</b>	Carbon monoxide and carbon dioxide

## SECTION 11: Toxicological information

<b>11.1 Information on toxicological effects</b>	
<b>Acute Toxicity:</b>	<b>LD50</b> (Oral, Rat) : 7360 mg/kg <b>LD50</b> (Dermal, Rabbit) : no data available <b>LC50</b> (Inhalation Rat) : no data available
<b>Skin corrosion/Irritation:</b>	Causes skin irritation(Category 2)
<b>Serious eye damage/irritation:</b>	Causes serious eye irritation(Category 2A)
<b>Respiratory damage/irritation:</b>	No data available
<b>Ingestion:</b>	No data available
<b>Germ cell mutagenicity:</b>	Negative
<b>Carcinogenicity:</b>	Negative
<b>Reproductive toxicity:</b>	no data available
<b>Specific target organ toxicity - single exposure:</b>	May cause respiratory irritation.
<b>Specific target organ toxicity - repeated exposure:</b>	No data available
<b>Aspiration hazard:</b>	No data available

<b>Signs and Symptoms of Exposure:</b>	Refer section 2.3
<b>11.2 Additional toxicological information</b>	
<b>Aquatic Toxicity:</b>	Fish <b>LC50</b> (96h): 75 mg/L Aquatic invertebrates <b>EC50</b> (48h): 70 mg/L Aquatic algae and cyanobacteria <b>EC50</b> (72h): 69 mg/L
<b>Biodegradability:</b>	Highly biodegradable

## SECTION 12: Ecological information

<b>12.1 Toxicity Aquatic toxicity:</b>	Fish <b>LC50</b> (96h): 75 mg/L Aquatic invertebrates <b>EC50</b> (48h): 70 mg/L Aquatic algae and cyanobacteria <b>EC50</b> (72h): 69 mg/L
<b>12.2 Persistence and degradability:</b>	After 7 days, 65.5 %, of the ThOD were removed. Readily biodegradable
<b>12.3 Bioaccumulative potential:</b>	No data available
<b>12.4 Mobility in soil:</b>	No data available
<b>12.5 Other adverse effects</b>	No data available

## SECTION 13: Disposal considerations

<b>13.1 Waste treatment methods</b>	
<b>Uncleaned packaging Recommendation:</b>	Dispose of in accordance with local hazardous waste regulations Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
<b>Recommended cleansing agents:</b>	Water and Mild Soap, Isopropyl Alcohol (IPA), Dilute Acid, Baking Soda, Enzyme-Based Cleaners

## SECTION 14: Transport information

<b>14.1 UN-Number · ADR, ADN, IMDG, IATA:</b>	None
<b>14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:</b>	Not applicable
<b>14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA :</b>	Not applicable
<b>14.4 Packing group · ADR, IMDG, IATA:</b>	Not applicable
<b>14.5 Environmental hazards:</b>	No data available
<b>14.6 Special precautions for user</b>	No data available

## SECTION 15: Regulatory information

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