GPS Safety Summary
Sorbic acid

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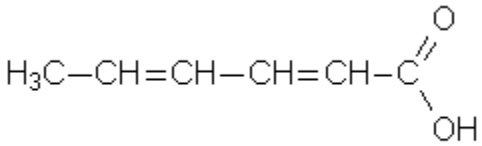
1. General Statements

Sorbic acid is a white, powdery solid with a faint odor, exhibiting slight water solubility and combustible, but only poorly flammable, properties. It poses potential acute or chronic health hazards upon exposure. Additionally, when finely powdered and dispersed in air, it presents a significant risk of dust explosion if an ignition source is present. Proper handling, storage, and safety measures are essential to mitigate these risks.

2. Chemical identification.

Name :Sorbic acid
CAS number(s) :110-44-1
EC number :203-768-7
Molecular formula :C6H6O2
Structure :



3. Uses and Benefits

Sorbic acid is a natural organic compound commonly used as a preservative in food, cosmetics, and pharmaceuticals.Used as a preservative in products such as Lotions,Creams,Shampoos,Facial cleansers.

4. Physical / chemical properties

Property	Value
Physical state :	Solid
Colour :	white.
Odour :	Odourless
pH :	NA
Melting point :	134.1 °C
Boiling point :	NA
Flash point :	127 °C Closed cup
Density :	1.2007 – 1.2026 g/cm3 Type: 'density' Temp.: 20 °C
Solubility in Water:	1.56 g/L

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5. Health Effects

Effect Assessment	Result
Acute toxicity (Oral / inhalation / dermal)	NA
Irritation / corrosion Skin / eye/ respiratory tract	Causes skin irritation,Causes serious eye irritation.
Respiratory or skin sensitisation	NA
Toxicity after repeated exposure Oral / inhalation / dermal	NA
Genotoxicity / Mutagenicity	NA
Carcinogenicity	NA
Toxicity for reproduction	NA

6. Environmental Effects

Effect Assessment	Result
Aquatic toxicity	No
Fate and behavior	**Result**
Persistence and degradability	Not rapidly degradable
Bioaccumulative potential	No additional information available

7. Exposure

Human health

It causes skin irritation, which means prolonged or repeated exposure may lead to redness, dryness, or cracking of the skin. It also may cause serious eye irritation, suggesting that contact with eyes can result in redness, watering, pain, or temporary vision impairment.The exposure must be kept as minimum as possible by the use of appropriate risk management measures suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers.Careless handling or accidental spillage of the chemical could result in exposure to potential hazardous levels of chemicals.Industrial workers should ensure that they follow the advice found in the extended safety data sheet (SDS).

Environment:

Care should be taken to avoid releases of these products to sewage, drainage systems and water bodies. Spillage shall be quickly collected in the event of an accidental release. More information about release measures and accidental release measures are available in the extended safety data sheet.

8. Risk Management Recommendations

Human health measures.

Organizational	A basic standard of occupational hygiene is recommended. Ensure operatives are well informed of the hazards and trained to minimise exposures. Ensure regular inspection and maintenance of equipment and machines. Handle and store according to the indications of the Safety Data Sheet.	
Protection	Eye protection:	Safety glasses
	Skin and body protection:	Wear suitable protective clothing
	Respiratory protection:	[In case of inadequate ventilation] wear respiratory protection.
Engineering controls	Ensure good ventilation of the work station.	
Environment protective measures		
Avoid release to the environment		

9. First-aid measures

First-aid measures after inhalation : Remove the person to fresh air and keep them comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : call a poison center or a doctor if you feel unwell.

Extinguishing media
Suitable extinguishing media : Water spray. Dry powder. Foam.

Unsuitable extinguishing media :Do not use a heavy water stream.

Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be release

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: seal off low-lying areas. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter a fire area without proper protective equipment, including respiratory protection.

11. Accidental release measures

Protective equipment : safety goggles. protective gloves.Wear self-contained breathing apparatus and special tightly sealed suit.

Environmental precautions : Avoid release to the environment. Notify authorities if a product enters sewers or public waters.

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leaks without risks if possible.

12. Disposal consideration

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

13. Handling and storage

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.Always wash hands after handling the products.

14. Classification and Labeling

Hazard pictograms (CLP)	:	 GHS07
Signal word (CLP)	:	Warning
Hazard statements (CLP)	:	H315 - Causes skin irritation. H319 - Causes serious eye irritation.
Precautionary statements (CLP)	:	P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear protective clothing, eye protection, face protection, protective gloves. P302+P352 - IF ON SKIN: Wash with plenty of water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P321 - Specific treatment (see supplemental first aid instruction on this label). P332+P313 - If skin irritation occurs: Get medical advice/attention.

15. Conclusion

Sorbic acid is a widely used preservative in food, cosmetics, and pharmaceuticals, valued for its antimicrobial properties. Although it is generally effective and stable, it poses several health and safety hazards that must be managed appropriately.Due to its irritant properties and dust explosion risk, sorbic acid must be handled with care in industrial settings. Proper storage, protective measures, and environmental precautions are essential to ensure both human safety and environmental protection.

16. Contact Information within company

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