

Material Safety Data Sheet

-- Ascorbyl Palmitate

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Ascorbyl Palmitate

Synonyms: L-Ascorbic acid 6-palmitate;

Molecular Formular: C₂₂H₃₈O₇

Molecular Weight: 414.54

CAS. No: 137-66-6

2. HAZARDS IDENTIFICATION

Most important hazards: Harmful to aquatic organisms, may cause long-term adverse effects in aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration
Ascorbyl Palmitate	137-66-6	100%
Others: No hazards		

4. FIRST AID MEASURES

Eyes: Rinse immediately with tap water for 10 minutes, open eyelids forcibly

Skin: Remove immediately contaminated clothes, wash affected skin with water and soap, do not use any solvents

Inhalation: Remove the casualty to fresh air and keep him/her calm. Consult physician.

Notes to physician: Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray jet, dry powder, foam, carbon dioxide

Specific hazards: Consider dust explosion hazard.

Protection of fire-fighters: Precipitate gases/vapors/mists with water spray

6. ACCIDENTAL RELEASE MEASURES

Environmental protection: Do not allow to enter drains or waterways.

Methods for cleaning up: Collect solids (avoid dust formation) and hand over to waste removal.

Clean contaminated areas with little ethanol.

7. HANDLING AND STORAGE

HANDLING

Technical measures: processing in closed systems, if possible superposed by inert gas (e.g. nitrogen). Local exhaust ventilation necessary. Take precautionary measures against electrostatic charging. Avoid dust formation; very high dust explosion hazard.

Suitable materials: Stainless steel, aluminum, enamel, glass, polyethylene. When plastics are used, possible electrostatic charges must be considered.

STORAGE

Storage conditions: Store in a dry place, room temperature.

Validity: 30 months, 20 to 25°C, in the unopened original container, see "best use before" date stated on the label.

Packaging materials: Tightly closing; material: stainless steel, glass, aluminum, enamel, polyethylene, plywood (lined with polyethylene bag), cardboard (lined with polyethylene bag)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Monitoring

Threshold value(hengtai) air: IOEL:10mg/m³(defined as 8-hour time-weighted average)

Analytics: Sampling on glass fibre filter and gravimetric or chemical determination

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: In case of open handling or accidental release: particle mask or respirator with independent air supply.

Hand protection: Protective gloves

Eye protection: Safety glasses

9. PHYSICAL AND CHEMICAL PROPERTIES

Colour	A white or yellow-white
Form	Powder
Odour	Almost odourless
Bulk density	About 0.24g/cm ³
Solubility	Insoluble in water, soluble in vegetable oils and ethanol.
Melting point	107~117°C

10. STABILITY AND REACTIVITY

Conditions to avoid: Light, heat ,humidity

Materials to avoid: oxidizing agents

11. TOXICOLOGICAL INFORMATION

Toxicity data	LD50 > 20,000mg/kg(oral, mouse) LD50 > 10,000mg/kg(oral, rat)
Local effects	Dust may irritate skin and eyes
Sensitization	May be slightly sensitizing (guinea pig)
Chronic toxicity	Low toxicity
Mutagenicity	No suspicion of human mutagenicity
Carcinogenicity	Not carcinogenic (several species)
Reproduction toxicity	Not teratogenic, not embryotoxic

Note: Oral uptake of up to 9g per day does not produce any serious toxic effects, however, even lesser quantities may cause diarrhea. ADI (Acceptable Daily Intake) 60mg/kg. GRAS (generally recognized as safe for human consumption)

12. ECOLOGICAL INFORMATION

Inherent biodegradability	Inherently biodegradable(48%,28days)
Ecotoxicity	Moderately toxic for fish (Suspension)(rainbow trout) LC50 (96h) 51mg/l LC100 (96h) 100mg/l LC0 (96h) 25mg/l
Air pollution	Observe local/national regulations

13. DISPOSAL CONSIDERATIONS

Waste from residues: Incinerate in qualified installation with flue gas scrubbing. Observe all local and national regulations regarding waste disposal.

14. TRANSPORT INFORMATION

General information: This product is not considered hazardous for transportation.

Land transport: ADR/RID/GGVS/GGVE

Sea transport: IMDG/GGVSee

IMO/IMDG CODE information: not regulated by imo/imdg

15. REGULATORY INFORMATION

EU classification and labelling

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S61: Avoid release to the environment. Refer to special instructions/Safety data sheets.

Emission limit(Switzerland): 50mg/m³ at mass-flux \geq 0.5kg/h(organic, particulate; Own classification)

Water hazard class (Germany): weakly hazardous for water (own classification according to directive vvwvs of 17.05.1999)

16. OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.