3-O-Ethyl Ascorbic Acid

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / March 26, 2012 / Rules and Regulation

Revision Date: 13-Jul-2026
Supersedes: 11-Dec-2025

1 PRODUCT & COMPANY IDENTIFICATION

Product Name: 3-O-Ethyl Ascorbic Acid
Synonyms: Ethyl Ascorbic Acid
INCI Name: 3-O-Ethyl Ascorbic Acid
CAS Number: 86404-04-8
Formula: C8H12O6
Product Form: Solid (Powder)
Product Use: Cosmetic use

Distributor: MakingCosmetics Inc.
Address: 10800 231st Way NE
Redmond, WA 98053 (USA)
Phone / Fax: 425-292-9502 / 425-292-9601
Web: **www.makingcosmetics.com**

Emergency Telephone Number: 1-800-424-9300 (Chemtrec)

2 HAZARDS IDENTIFICATION

Classification: Eye irritation - Category 2
Signal Word: **WARNING!**
Hazard Pictograms:

Hazard Statements: H319: Causes serious eye irritation.
Precautionary Statements: (Prevention) P264: Wash thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection/ hearing protection.
(Response) P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Potential Health Hazards: Eyes: Causes serious eye irritation
Inhalation: May be an irritant.
Skin: May be an irritant.
Ingestion: May cause nausea, vomiting, and diarrhea.

NFPA Ratings (704):

Health	N/A	N/A
Flammability	N/A	N/A
Reactivity	N/A	N/A
Specific Hazard	N/A	

3 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %	Molecular Weight
3-O-Ethyl Ascorbic Acid	86404-04-8	100%	Not Available

4 FIRST AID MEASURES

Eyes: Rinse with pure water for at least 15 minutes. Consult a doctor.
Inhalation: Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.
Skin: Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.
Ingestion: Do Not Induce Vomiting. Never give anything by mouth to an unconscious person. If the patient feels unwell, seek medical advice. Rinse mouth with water. Call a doctor or Poison Control Center immediately.

5 FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:	May be combustible at high temperatures. Use appropriate media (dry chemical, carbon dioxide or alcohol-resistant foam) for surrounding environment for adjacent fire. No unsuitable extinguish media listed.
Special protective equipment & precautions for firefighters:	Wear self-contained breathing apparatus and full protective clothing, including eye protection and boots.
Flash Points:	No data available.
Specific hazards arising from the chemical:	None listed. See also Stability and reactivity section.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment & emergency procedures:	Avoid dust formation. Avoid breathing mist, gas or vapors. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Do not try to clean up the leak without proper protective equipment. See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions:	Prevent further spillage or leakage if it is safe to do so. Avoid liquid release into sewers/public water/environment. Notify environmental authorities in case of leak.
Methods and material for containment and cleaning up:	Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Dispose of absorbed material in accordance with the regulations.

7 HANDLING & STORAGE

Precautions for safe handling:	Handle in a well-ventilated place. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam. Keep container tightly closed and dry. Use good personal hygiene practice. See section 8 for recommendations on the use of personal protective equipment.
Conditions for safe storage, incl. any incompatibilities:	Keep container tightly closed in a dry and well-ventilated area. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in inert atmosphere. Sealed in dry, 2-8°C. Store away from incompatible materials (see section 10 for incompatibilities).

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	Exposure Limits	Basis	Entity
3-O-Ethyl Ascorbic Acid	Not available		

TWA: Time Weighted Average over 8 hours of work.
TLV: Threshold Limit Value over 8 hours of work.
REL: Recommended Exposure Limit
PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.
IDLH: Immediately Dangerous to Life or Health
WEEL: Workplace Environmental Exposure Levels
CEIL: Ceiling

Personal Protection:

Eyes:	Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Inhalation:	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Control of environmental exposure. Do not let product enter drains.
Body:	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. Wear a complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Other:	Use good personal hygiene practices. Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Solid (Powder)	**Vapor Pressure:**	No data available
Odor:	No data available	**Vapor Density:**	No data available
Odor Threshold:	No data available	**Evaporation Rate:**	No data available
Color:	White to very pale-yellow crystalline powder	**Flammability:**	No data available
Molecular Weight:	204.178	**Upper/lower Explosive Limit:**	No data available
pH:	No data available	**Flash Point:**	57°F / 14°C (lit.)
Boiling Point:	482°F (250°C)	**Specific Gravity:**	No data available
Melting/Freezing Point:	115 °C. Atm. press.:1 013 hPa.	**Water Solubility at 20°C:**	In water: ≥1 000 ≤ g/L
Relative Density 20°C:	1.47 g/cm³	**Auto-Ignition Temperature:**	No data available
Partition Coefficient: n-octanol/water at 20°C:	-0.8	**Decomposition Temperature:**	No data available
Viscosity:	No data available	**Explosive Properties:**	No data available
Oxidizing Properties:	No data available	**Metal Corrosion:**	No data available

10 STABILITY AND REACTIVITY

Reactivity:	No data available.
Chemical Stability:	Stable under recommended storage conditions.
Hazardous Polymerization:	No data available.
Conditions to Avoid:	No data available.
Incompatible Materials:	Strong oxidizing agents.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.
Possible Hazardous Reactions:	No data available.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity:	No data available.
Skin:	No data available.
Eyes:	No data available.
Inhalation:	No data available.
Ingestion:	No data available.
Carcinogenicity:	No data available.
Teratogenicity:	No data available.
Germ Cell Mutagenicity:	No data available.
Embryotoxicity:	No data available.
Specific Target Organ Toxicity:	No data available.
Reproductive Toxicity:	No data available.

12 ECOLOGICAL INFORMATION

Ecotoxicity:	No data available.
Aquatic Vertebrate:	No data available.
Aquatic Invertebrate:	(Daphnia magna) EC50- > 78 mg/L; 48 hours.
Algae:	(Pseudokirchneriella subcapitata) EC50 - > 81 mg/L- 72 hours.
Persistence and Degradability:	No data available.
Bioaccumulative Potential:	No data available.
Mobility in Soil:	No data available.
PBT and vPvB Assessment:	No data available.
Other Adverse Effects:	No data available.

13 DISPOSAL CONSIDERATIONS

Waste Residues: Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product.

Product Containers: Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product container.

The information in section 13 is for the product as shipped. Use and/or alterations to the product may change the characteristics of the material and alter the waste classification and proper disposal methods

14 TRANSPORT INFORMATION

DOT (Dept. of Transportation, USA):	No data available.
TDG (Transportation of Dangerous Goods, Canada):	No data available.
IMDG (International Maritime Dangerous Goods):	Not dangerous goods.
IATA (International Air Transport Association):	Not dangerous goods.
ADR/RID (EU Land Transportation):	Not dangerous goods.
ICAO (International Civil Aviation Organization):	No data available.

15 REGULATORY INFORMATION

TSCA Inventory Status:	No data available.
Canada (DSL):	No data available.
EU (EINECS):	No data available.
China (IECSC):	No data available.
Australia (AICS):	No data available.
Japan (ENCS):	No data available.
Philippines (PICCS):	No data available.
Korea (KECI):	No data available.
New Zealand (NZIoC):	No data available.

16 OTHER INFORMATION

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Compliance: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

Disclaimer: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitableness & completeness of such information for his own particular use.