

Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name	L(+)-Ascorbyl palmitate (6-palmitoyl-L-ascorbic acid) Ph Eur,BP,NF,FCC, E 304	Product Code	5.00090
Manufacturer	EMD Chemicals Inc. P.O. Box 70 480 Democrat Road Gibbstown, NJ 08027 Prior to January 1, 2003 EMD Chemicals Inc. was EM Industries, Inc. or EM Science, Division of EM Industries, Inc.	Effective Date	3/4/2003
For More Information Call	856-423-6300 Technical Service Monday-Friday: 8:00 AM – 5:00 PM	In Case of Emergency Call	800-424-9300 CHEMTREC (USA) 613-996-6666 CANUTEC (Canada) 24 Hours/Day: 7 Days/Week
Synonym	Palmitoyl-L-ascorbic acid		
Material Uses	Analytical reagent.		
Chemical Family	Ester.		

Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
L(+)-Ascorbyl palmitate(6-palmitoyl-L-ascorbic acid) Ph Eur,BP,NF,FCC,E304	137-66-6	100

Section 3. Hazards Identification

Physical State and Appearance	Solid.
Emergency Overview	CAUTION ! MAY BE HARMFUL IF INHALED OR SWALLOWED.
Routes of Entry	Inhalation. Ingestion.
Potential Acute Health Effects	
Eyes	No known effect on eye contact, rinse with water for a few minutes.
Skin	No known effect on skin contact; rinse with water for a few minutes.
Inhalation	May be hazardous in case of inhalation.
Ingestion	May be hazardous in case of ingestion.
Potential Chronic Health Effects	
Carcinogenic Effects	This material is not known to cause cancer in animals or humans.
	Additional information See Toxicological Information (section 11)
Medical Conditions Aggravated by Overexposure:	Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact	Wash with soap and water. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 5. Fire Fighting Measures

Flammability of the Product	Non-flammable.
Auto-ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Not applicable.
Fire Hazards in Presence of Various Substances	Not applicable.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of static discharge: No. Risks of explosion of the product in presence of mechanical impact: No.
Fire Fighting Media and Instructions	Use DRY chemical powder.
Protective Clothing (Fire)	A self-contained breathing apparatus should be used to avoid inhalation of the product.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Dust can combine with air to form an explosive mixture

Section 6. Accidental Release Measures

Small Spill and Leak	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill and Leak	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.
Spill Kit Information	No specific spill kit required for this product.

Section 7. Handling and Storage

Handling	Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing dust. Use only with adequate ventilation. Wash thoroughly after handling.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated

area. Store between 15 to 25°C (59 to 77°F).

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	
Eyes	Safety glasses.
Body	Lab coat.
Respiratory	Dust respirator. Be sure to use an approved/certified respirator or equivalent.
Hands	Gloves.
Feet	Not applicable.
Protective Clothing (Pictograms)	
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Product Name	Exposure Limits
L(+)-Ascorbyl palmitate(6-palmitoyl-L-ascorbic acid) Ph Eur, BP, NF, FCC, E304	Not available.

Section 9. Physical and Chemical Properties

Odor	Characteristic. (Slight.)
Color	White.
Physical State and Appearance	Solid.
Molecular Weight	414.54 g/mole
Molecular Formula	C ₂₂ -H ₃₈ -O ₇
pH	Not applicable.
Boiling/Condensation Point	>250°C (482°F)
Melting/Freezing Point	111 to 115°C (231.8 to 239°F)
Specific Gravity	Not available.
Vapor Pressure	Not available.
Vapor Density	Not available.
Odor Threshold	Not available.
Evaporation Rate	Not available.
LogKow	Not available.
Solubility	Insoluble in water.

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	Not available.

Incompatibility with Reactive with metals.

Various Substances

Rem/Incompatibility Avoid excessive heat. Incompatible with lithium metals.

Hazardous Not available.

Decomposition

Products

Hazardous Will not occur.

Polymerization

Section 11. Toxicological Information

RTECS Number:

L(+)-Ascorbyl palmitate
(6-palmitoyl-L-ascorbic acid) Ph
Eur,BP,NF,FCC, E 304

CI7671040

Toxicity Acute oral toxicity (LD50): 2500 mg/kg [Mouse].

Acute dermal toxicity (LD50): >3000 mg/kg [Guinea pig].

Chronic Effects on Not available.

Humans

Acute Effects on Non-permeator by skin. May be hazardous in case of inhalation. May be
Humans hazardous in case of ingestion.

Synergetic Products Not available.

(Toxicologically)

Irritancy Draize Test: Not available.

Sensitization Not available.

Carcinogenic This material is not known to cause cancer in animals or humans.

Effects

Toxicity to Not available.

Reproductive

System

Teratogenic Effects Not available.

Mutagenic Effects Not available.

Section 12. Ecological Information

Ecotoxicity Not available.

BOD5 and COD Not available.

Toxicity of the The products of degradation are less toxic than the product itself.

Products of

Biodegradation

Section 13. Disposal Considerations

EPA Waste Not available.

Number

Treatment Material does not have an EPA Waste number and is not a listed waste, however consultation with a permitted waste disposal site (TSD) should be accomplished.
ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

Section 14. Transport Information

DOT Classification Proper Shipping Name:
CHEMICALS,N.O.S.
RQ: Not applicable.

TDG Classification Not available.

IMO/IMDG Not available.

Classification

ICAO/IATA Not available.

Classification

Section 15. Regulatory Information

U.S. Federal Regulations TSCA 8(b) inventory: L(+)-Ascorbyl palmitate(6-palmitoyl-L-ascorbic acid) Ph Eur,BP,NF,FCC,E304
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution – chemical inventory – hazard identification: No products were found.
SARA 313 toxic chemical notification and release reporting: No products were found.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean air act (CAA) 112 accidental release prevention: No products were found.
Clean air act (CAA) 112 regulated flammable substances: No products were found.
Clean air act (CAA) 112 regulated toxic substances: No products were found.

WHMIS (Canada) Not controlled under WHMIS (Canada).
CEPA DSL: L(+)-Ascorbyl palmitate(6-palmitoyl-L-ascorbic acid) Ph Eur,BP,NF,FCC,E304
This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.

International Regulations

EINECS L(+)-Ascorbyl palmitate(6-palmitoyl-L-ascorbic acid) Ph Eur,BP,NF,FCC,E304 205-305-4

DSCL (EEC) This product is not classified according to the EU regulations.

International Lists Australia (NICNAS): L(+)-Ascorbyl palmitate(6-palmitoyl-L-ascorbic acid) Ph Eur,BP,NF,FCC,E304

China: L(+)-Ascorbyl palmitate(6-palmitoyl-L-ascorbic acid) Ph Eur,BP,NF,FCC,E304

Japan (MITI): L(+)-Ascorbyl palmitate(6-palmitoyl-L-ascorbic acid) Ph Eur,BP,NF,FCC,E304

Korea (TCCL): L(+)-Ascorbyl palmitate(6-palmitoyl-L-ascorbic acid) Ph Eur,BP,NF,FCC,E304

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Philippines (RA6969): L(+)-Ascorbyl palmitate(6-palmitoyl-L-ascorbic acid) Ph Eur, BP, NF, FCC, E304

China: L(+)-Ascorbyl palmitate(6-palmitoyl-L-ascorbic acid) Ph Eur, BP, NF, FCC, E304

State Regulations New Jersey: L(+)-Ascorbyl palmitate(6-palmitoyl-L-ascorbic acid) Ph Eur, BP, NF, FCC, E304

California prop. 65: No products were found.

Section 16. Other Information

**National Fire
Protection
Association
(U.S.A.)**

0 0

Health¹

Fire Hazard

Reactivity

Specific Hazard

**Changed Since Last
Revision** +

Notice to Reader

The statements contained herein are based upon technical data that EMD Chemicals Inc. believes to be reliable, are offered for information purposes only and as a guide to the appropriate precautionary and emergency handling of the material by a properly trained person having the necessary technical skills. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use, storage and disposal of these materials and the safety and health of employees and customers and the protection of the environment. EMD CHEMICALS INC. MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, WITH RESPECT TO THE INFORMATION HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS.
