



# SAFETY DATA SHEET ASCORBYL PALMITATE REVISION 4, DATE 02 JAN 22

## 1. IDENTIFICATION

<b>Product Name</b>	<b>Ascorbyl Palmitate</b>
<b>Other Names</b>	6-Palmitoyl-L-ascorbic acid; Vitamin C palmitate
<b>Uses</b>	Food additive; Antioxidant for fats and oils in food.
<b>Chemical Family</b>	No Data Available
<b>Chemical Formula</b>	C22H38O7
<b>Chemical Name</b>	L-Ascorbic acid, 6-hexadecanoate
<b>Product Description</b>	Fat soluble derivative of vitamin C.

### Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

### Emergency Contact Details

*For emergencies only; DO NOT contact these companies for general product advice.*

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

## 2. HAZARD IDENTIFICATION

**Poisons Schedule (Aust)**

Not Scheduled



## Globally Harmonised System

<b>Hazard Classification</b>		Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)	
<b>Hazard Categories</b>		Long-term Hazard To The Aquatic Environment - Category 3	
<b>Signal Word</b>		None	
<b>Hazard Statements</b>		<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>Precautionary Statements</b>	Prevention	<b>P273</b>	Avoid release to the environment.
	Disposal	<b>P501</b>	Dispose of contents/container in accordance with local / regional / national / international regulations.

## National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road &amp; Rail (ADG Code)

<b>Dangerous Goods Classification</b>	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
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## Safe Work Australia

National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

<b>Hazard Classification</b>	NOT hazardous according to the criteria of Safe Work Australia under Model WHS Regulations
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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

## Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Ascorbyl palmitate	C22H38O7	137-66-6	<=100 %

## 4. FIRST AID MEASURES

## Description of necessary measures according to routes of exposure

<b>Swallowed</b>	IF SWALLOWED: Rinse mouth, then drink plenty of water. Do not induce vomiting. Get medical advice/attention if you feel unwell. Never give anything by mouth to an unconscious person.
<b>Eye</b>	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for 10 to 15 minutes. If eye irritation persists, get medical advice/attention.
<b>Skin</b>	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical advice/attention.
<b>Inhaled</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention.
<b>Advice to Doctor</b>	Treat symptomatically and supportively. *Most important symptoms and effects, both acute and delayed: May cause gastrointestinal discomfort, diarrhoea if consumed in large amounts. Dust may irritate skin and eyes. No information available.

Medical Conditions Aggravated by  
Exposure

## 5. FIRE FIGHTING MEASURES

<b>General Measures</b>	If safe to do so, move undamaged containers from fire area. Cool container with water spray until well after fire is out. Dike fire-control water for later disposal.
<b>Flammability Conditions</b>	Combustible solid; may burn but does not ignite readily.
<b>Extinguishing Media</b>	Use dry chemical, Carbon dioxide (CO <sub>2</sub> ), foam or water spray for extinction - Do not use high volume water jet.
<b>Fire and Explosion Hazard</b>	Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
<b>Hazardous Products of Combustion</b>	Fire may produce irritating and/or toxic gases, including oxides of Carbon.
<b>Special Fire Fighting Instructions</b>	Contain runoff from fire control or dilution water - Runoff may cause pollution.
<b>Personal Protective Equipment</b>	Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.
<b>Flash Point</b>	No Data Available
<b>Lower Explosion Limit</b>	No Data Available
<b>Upper Explosion Limit</b>	No Data Available
<b>Auto Ignition Temperature</b>	No Data Available
<b>Hazchem Code</b>	No Data Available

## 6. ACCIDENTAL RELEASE MEASURES

<b>General Response Procedure</b>	Ensure adequate ventilation. ELIMINATE all ignition sources (if dust clouds can occur). Do not touch or walk through spilled material. Avoid generating dust. Avoid breathing dusts or mists and contact with eyes, skin and clothing.
<b>Clean Up Procedures</b>	Cover with damp absorbent(inert material, sand or soil). Vacuum or sweep material and transfer to properly labelled containers for disposal (see SECTION 13).
<b>Containment</b>	Stop leak if you can do it without risk. Prevent dust cloud. Prevent entry into waterways, sewers, basements or confined areas.
<b>Decontamination</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.
<b>Environmental Precautionary Measures</b>	Prevent entry into drains and waterways.
<b>Evacuation Criteria</b>	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
<b>Personal Precautionary Measures</b>	Use personal protective equipment as required (see SECTION 8).

## 7. HANDLING AND STORAGE

<b>Handling</b>	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Minimise dust generation and accumulation. Avoid breathing dusts or mists and contact with eyes, skin and clothing. Use personal protective equipment as required (see SECTION 8). WARNING: May form combustible dust concentrations in air! Keep away from heat and sources of ignition - No smoking. Take precautionary measures against static discharges. Avoid release to the environment.
<b>Storage</b>	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed when not in use. Protect from moisture/humidity. Keep away from heat and sources of ignition - No smoking. Keep away from incompatible substances (see SECTION 10).

\*Recommended storage temperature: 8 ~ 15 °C

#### Container

Keep in the original container or suitable materials, i.e. Stainless steel, aluminium, enamel, glass, polyethylene.

\*When plastics are used, possible electrostatic charges must be considered.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>General</b>	No value assigned for this specific material by Safe Work Australia. For dusts from solid substances without specific occupational exposure standards: - Safe Work Australia Exposure Standard (Nuisance dusts): 8 hr TWA = 10 mg/m <sup>3</sup> , measured as inhalable dust. - New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m <sup>3</sup> (total); TWA = 3 mg/m <sup>3</sup> (respirable).
<b>Exposure Limits</b>	No Data Available
<b>Biological Limits</b>	No information available.
<b>Engineering Measures</b>	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
<b>Personal Protection Equipment</b>	- Respiratory protection: Wear respiratory protection in case of inadequate ventilation, when handling larger quantities or accidental release. Recommended: Dust mask/particulate respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses. - Hand protection: Handle with gloves. Recommended: Impervious gloves, e.g. Nitrile rubber. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls, safety shoes/boots.
<b>Special Hazards Precautions</b>	No information available.
<b>Work Hygienic Practices</b>	Do not eat, drink or smoke when using this product. Wash hands and face before breaks and immediately after handling the product. Take off contaminated clothing and wash it before reuse. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid
<b>Appearance</b>	Powder
<b>Odour</b>	Almost odourless
<b>Colour</b>	White to yellowish
<b>pH</b>	No Data Available
<b>Vapour Pressure</b>	No Data Available
<b>Relative Vapour Density</b>	No Data Available
<b>Boiling Point</b>	No Data Available
<b>Melting Point</b>	107 - 117 °C
<b>Freezing Point</b>	No Data Available
<b>Solubility</b>	Insoluble in water - Soluble in vegetable oils and ethanol
<b>Specific Gravity</b>	No Data Available
<b>Flash Point</b>	No Data Available
<b>Auto Ignition Temp</b>	No Data Available
<b>Evaporation Rate</b>	No Data Available
<b>Bulk Density</b>	0.15 ~ 1.25 g/cm <sup>3</sup>
<b>Corrosion Rate</b>	No Data Available
<b>Decomposition Temperature</b>	No Data Available
<b>Density</b>	0.40 - 0.50 g/cm <sup>3</sup> (tapped)
<b>Specific Heat</b>	No Data Available

<b>Molecular Weight</b>	No Data Available
<b>Net Propellant Weight</b>	No Data Available
<b>Octanol Water Coefficient</b>	No Data Available
<b>Particle Size</b>	No Data Available
<b>Partition Coefficient</b>	No Data Available
<b>Saturated Vapour Concentration</b>	No Data Available
<b>Vapour Temperature</b>	No Data Available
<b>Viscosity</b>	No Data Available
<b>Volatile Percent</b>	No Data Available
<b>VOC Volume</b>	No Data Available
<b>Additional Characteristics</b>	No information available.
<b>Potential for Dust Explosion</b>	Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
<b>Fast or Intensely Burning Characteristics</b>	No information available.
<b>Flame Propagation or Burning Rate of Solid Materials</b>	No information available.
<b>Non-Flammables That Could Contribute Unusual Hazards to a Fire</b>	No information available.
<b>Properties That May Initiate or Contribute to Fire Intensity</b>	Combustible solid; may burn but does not ignite readily.
<b>Reactions That Release Gases or Vapours</b>	Fire/decomposition may produce irritating and/or toxic gases, including oxides of Carbon.
<b>Release of Invisible Flammable Vapours and Gases</b>	No information available.

## 10. STABILITY AND REACTIVITY

<b>General Information</b>	Sensitive to light.
<b>Chemical Stability</b>	Stable under normal conditions of use.
<b>Conditions to Avoid</b>	Avoid generating dust. Keep away from heat and sources of ignition. Protect from moisture/humidity.
<b>Materials to Avoid</b>	Incompatible/reactive with strong oxidising agents.
<b>Hazardous Decomposition Products</b>	Fire/decomposition may produce irritating and/or toxic gases, including oxides of Carbon.
<b>Hazardous Polymerisation</b>	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>General Information</b>	<p>Information on toxicological effects:</p> <ul style="list-style-type: none"> <li>- Acute toxicity: Low toxicity.</li> <li>- Skin corrosion/irritation: No information available.</li> <li>- Serious eye damage/irritation: No information available.</li> <li>- Respiratory/skin sensitisation: May be slightly sensitising (Guinea pig).</li> <li>- Germ cell mutagenicity: No suspicion of human mutagenicity.</li> <li>- Carcinogenicity: Not carcinogenic.</li> <li>- Reproductive toxicity: Not teratogenic; not embryotoxic.</li> <li>- STOT (single exposure): No information available.</li> <li>- STOT (repeated exposure): No information available.</li> </ul>
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- Aspiration toxicity: No information available.

Information on likely routes of exposure:

- Ingestion: Generally recognised as safe for human consumption (ADI: 60 mg/kg). May cause gastrointestinal discomfort, diarrhoea if consumed in large amounts.

- Eye contact: Dust may irritate eyes.

- Skin contact: Dust may irritate skin.

- Inhalation: May cause irritation.

Chronic effects: No information available.

#### Acute

##### Ingestion

Acute toxicity (Oral):

- LD50, Rat: >10,000 mg/kg [Supplier's SDS].

- LD50, Mouse: >20,000 mg/kg [Supplier's SDS].

##### Carcinogen Category

None

## 12. ECOLOGICAL INFORMATION

##### Ecotoxicity

Aquatic toxicity:

- LC0, Fish (Rainbow trout): 25 mg/L (96 h) (suspension) [Supplier's SDS].

- LC50, Fish (Rainbow trout): 51 mg/L (96 h) (suspension) [Supplier's SDS].

- LC100, Fish (Rainbow trout): 100 mg/L (96 h) (suspension) [Supplier's SDS].

##### Persistence/Degradability

Inherently biodegradable.

##### Mobility

No information available.

##### Environmental Fate

Harmful to aquatic life with long lasting effects - Avoid release to the environment.

##### Bioaccumulation Potential

No information available.

##### Environmental Impact

No Data Available

## 13. DISPOSAL CONSIDERATIONS

##### General Information

Dispose of contents/container in accordance with local/regional/national regulations. Incinerate in a qualified installation with flue gas scrubbing.

##### Special Precautions for Land Fill

No information available.

## 14. TRANSPORT INFORMATION

#### Land Transport (Australia)

ADG Code

##### Proper Shipping Name

Ascorbyl Palmitate

##### Class

No Data Available

##### Subsidiary Risk(s)

No Data Available

No Data Available

##### UN Number

No Data Available

##### Hazchem

No Data Available

##### Pack Group

No Data Available

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**Special Provision**

No Data Available

**Comments**

NON-DANGEROUS GOODS: Not regulated for LAND transport.

**Land Transport (Malaysia)**

ADR Code

**Proper Shipping Name**

Ascorbyl Palmitate

**Class**

No Data Available

**Subsidiary Risk(s)**

No Data Available

No Data Available

**UN Number**

No Data Available

**Hazchem**

No Data Available

**Pack Group**

No Data Available

**Special Provision**

No Data Available

**Comments**

NON-DANGEROUS GOODS: Not regulated for LAND transport.

**Land Transport (New Zealand)**

NZS5433

**Proper Shipping Name**

Ascorbyl Palmitate

**Class**

No Data Available

**Subsidiary Risk(s)**

No Data Available

No Data Available

**UN Number**

No Data Available

**Hazchem**

No Data Available

**Pack Group**

No Data Available

**Special Provision**

No Data Available

**Comments**

NON-DANGEROUS GOODS: Not regulated for LAND transport.

**Land Transport (United States of America)**

US DOT

**Proper Shipping Name**

Ascorbyl Palmitate

**Class**

No Data Available

**Subsidiary Risk(s)**

No Data Available

No Data Available

**UN Number**

No Data Available

**Hazchem**

No Data Available

**Pack Group**

No Data Available

**Special Provision**

No Data Available

**Comments**

NON-DANGEROUS GOODS: Not regulated for LAND transport.

**Sea Transport**

IMDG Code

**Proper Shipping Name**

Ascorbyl Palmitate

**Class**

No Data Available

**Subsidiary Risk(s)**

No Data Available

**UN Number**

No Data Available

**Hazchem**

No Data Available

**Pack Group**

No Data Available

**Special Provision**

No Data Available

**SAFETY DATA SHEET ASCORBYL PALMITATE REVISION 4, DATE 02 JAN 22**

<b>EMS</b>	No Data Available
<b>Marine Pollutant</b>	No
<b>Comments</b>	NON-DANGEROUS GOODS: Not regulated for SEA transport.

**Air Transport**

IATA DGR

<b>Proper Shipping Name</b>	Ascorbyl Palmitate
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available
<b>Comments</b>	NON-DANGEROUS GOODS: Not regulated for AIR transport.

**National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road &amp; Rail (ADG Code)

<b>Dangerous Goods Classification</b>	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
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**15. REGULATORY INFORMATION**

<b>General Information</b>	No Data Available
<b>Poisons Schedule (Aust)</b>	Not Scheduled

**Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

<b>Approval Code</b>	HSR002578 - Food Additives and Fragrance Materials (Subsidiary Hazard) Group Standard 2020
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**National/Regional Inventories**

<b>Australia (AIIIC)</b>	Listed
<b>Canada (DSL)</b>	Listed
<b>Canada (NDSL)</b>	Not Determined
<b>China (IECSC)</b>	Listed
<b>Europe (EINECS)</b>	205-305-4
<b>Europe (REACH)</b>	Not Determined
<b>Japan (ENCS/METI)</b>	Listed
<b>Korea (KECI)</b>	Listed
<b>Malaysia (EHS Register)</b>	Not Determined



New Zealand (NZIoC)	Listed
Philippines (PICCS)	Listed
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Listed
USA (TSCA)	Listed

## 16. OTHER INFORMATION

Related Product Codes	ASPALM1000, ASPALM1001, ASPALM1002, ASPALM1004, ASPALM1100, ASPALM2000, ASPALM3000, ASPALM3500, ASPALM3600, ASPALM3610, ASPALM4000
Revision	4
Revision Date	02 Jan 2022
Key/Legend	<p>&lt; Less Than &gt; Greater Than</p> <p><b>AICS</b> Australian Inventory of Chemical Substances  <b>atm</b> Atmosphere  <b>CAS</b> Chemical Abstracts Service (Registry Number)  <b>cm<sup>2</sup></b> Square Centimetres  <b>CO<sub>2</sub></b> Carbon Dioxide  <b>COD</b> Chemical Oxygen Demand  <b>deg C (°C)</b> Degrees Celcius  <b>EPA (New Zealand)</b> Environmental Protection Authority of New Zealand  <b>deg F (°F)</b> Degrees Farenheit  <b>g</b> Grams  <b>g/cm<sup>3</sup></b> Grams per Cubic Centimetre  <b>g/l</b> Grams per Litre  <b>HSNO</b> Hazardous Substance and New Organism  <b>IDLH</b> Immediately Dangerous to Life and Health  <b>immiscible</b> Liquids are insoluable in each other.  <b>inHg</b> Inch of Mercury  <b>inH<sub>2</sub>O</b> Inch of Water  <b>K</b> Kelvin  <b>kg</b> Kilogram  <b>kg/m<sup>3</sup></b> Kilograms per Cubic Metre  <b>lb</b> Pound  <b>LC<sub>50</sub></b> LC stands for lethal concentration. LC<sub>50</sub> is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.  <b>LD<sub>50</sub></b> LD stands for Lethal Dose. LD<sub>50</sub> is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.  <b>ltr</b> or <b>L</b> Litre  <b>m<sup>3</sup></b> Cubic Metre  <b>mbar</b> Millibar  <b>mg</b> Milligram  <b>mg/24H</b> Milligrams per 24 Hours  <b>mg/kg</b> Milligrams per Kilogram  <b>mg/m<sup>3</sup></b> Milligrams per Cubic Metre  <b>Misc</b> or <b>Miscible</b> Liquids form one homogeneous liquid phase regardless of the amount of either component present.  <b>mm</b> Millimetre  <b>mmH<sub>2</sub>O</b> Millimetres of Water  <b>mPa.s</b> Millipascals per Second  <b>N/A</b> Not Applicable  <b>NIOSH</b> National Institute for Occupational Safety and Health</p>

**NOHSC** National Occupational Health and Safety Commission  
**OECD** Organisation for Economic Co-operation and Development  
**Oz** Ounce  
**PEL** Permissible Exposure Limit  
**Pa** Pascal  
**ppb** Parts per Billion  
**ppm** Parts per Million  
**ppm/2h** Parts per Million per 2 Hours  
**ppm/6h** Parts per Million per 6 Hours  
**psi** Pounds per Square Inch  
**R** Rankine  
**RCP** Reciprocal Calculation Procedure  
**STEL** Short Term Exposure Limit  
**TLV** Threshold Limit Value  
**tne** Tonne  
**TWA** Time Weighted Average  
**ug/24H** Micrograms per 24 Hours  
**UN** United Nations  
**wt** Weight