

**Safety Data Sheet**

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Beta Carotene Beadlets 10% WS (167 IU/mg)
Commercial Name Not available.
Product Use Colouring agent for food& pharm. products,fortification of foods,Ingredient for dietary supplements
Restrictions On Use Not available.
Product Code 30-2356
Company PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: Eye irritation : Category 2A
CFR 1910.1200

Signal Word WARNING

Hazard Statement(s) May form combustible dust concentrations in air. Causes serious eye irritation.

Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention P264 Wash skin thoroughly after handling. P280 Wear eye protection/ face 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. P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage Not available.
Disposal Not available.

Section 3: Composition/Information on Ingredients

Substance/Mixture Mixture
Components Sucrose, Corn starch, β,β -carotene, 6-O-palmitoylascorbic acid (L-ascorbyl palmitate), 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol (dl-alpha-tocopherol)
% By Weight 30 - 50, 30 - 50, 10 - 20, 1 - 5, 1 - 5
CAS# 57-50-1, 9005-25-8,
Molecular Weight 536.85 g/mole
Chemical Formula C₄₀H₅₆
Synonym(s) Not available.

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Sucrose	57-50-1	30 - 50	Not available.	Not applicable.
Corn starch	9005-25-8	30 - 50	Notavailable.	Notavailable.
β,β -carotene	7235-40-7	10 - 20	Notavailable.	Notavailable.
6-O-palmitoylascorbic acid (L-ascorbyl palmitate)	137-66-6	1 - 5	Notavailable.	Notavailable.
3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol (dl-alpha-tocopherol)	10191-41-0	1 - 5	Notavailable.	Notavailable.

Section 4: First-Aid Measures

Inhalation	Move to fresh air. Consult a physician after significant exposure.
Skin Contact	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician.
Eye Contact	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Obtain medical attention.
Symptoms/Effects	
Acute	Not available.
Delayed	Not available.
Immediate Medical Attention	
Notes to physician: Treat symptomatically.	

Section 5: Fire-Fighting Measures
Suitable Extinguishing Media

Water and Foam

Unsuitable Extinguishing Media

Not available.

Products of Combustion

These products are carbon oxides (CO, CO₂). Consider dust explosion hazard.

Firefighters Special Equipment and Precautions

In the event of fire, wear self-contained breathing apparatus

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid dust formation. Environmental precautions: Try to prevent the material from entering drains or water courses. Methods and materials for containment and cleaning up: Sweep up and shovel.

Section 7: Handling and Storage

Advice on protection against fire and explosion: Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. Take precautionary measures against static discharges. Advice on safe handling: Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Conditions for safe storage: To maintain product quality, do not store in heat or direct sunlight. Keep container tightly closed and dry.

Section 8: Exposure Controls/Personal Protection

Exposure Limits	sucrose 57-50-1 TWA 10 mg/m ³ ACGIH TWA (Respirable) 5 mg/m ³ NIOSH REL TWA (total) 10 mg/m ³ NIOSH REL TWA (total dust) 15 mg/m ³ OSHA Z-1 TWA (respirable fraction) 5 mg/m ³ OSHA Z-1 starch 9005-25-8 TWA 10 mg/m ³ ACGIH TWA (Respirable) 5 mg/m ³ NIOSH REL TWA (total) 10 mg/m ³ NIOSH REL TWA (total dust) 15 mg/m ³ OSHA Z-1 TWA (respirable fraction) 5 mg/m ³ OSHA Z-1 β,β-carotene 7235-40-7 TWA 1.5 mg/m ³ DSM Internal Limit
Engineering Controls	Not available.
Personal Protection	Respiratory protection: In the case of dust or aerosol formation use respirator with an approved filter. Hand protection: Remarks : Consider the hazard characteristics of this product and any special workplace conditions when selecting the appropriate type of protective gloves. Glove material: for example nitrile rubber Eye protection : Safety glasses with side-shields Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place. Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9: Physical and Chemical Properties

Appearance red - brown free flowing particles

Odor very faint

Odor Threshold Not available.

Melting Point Not available.

Freezing Point Not available.

Boiling Point/Range Not available.

Decomposition temperature Not available.

Partition Coefficient: Not available.

n-octanol/water

pH Not available.

Vapor Pressure Not applicable.

Vapor Density Not available.

Viscosity Not available.

Evaporation Rate Not available.

Flash Point Not available.

Flammability May form combustible dust c

Autoignition temperature Not available.

Flammability or Explosive Limits:

Lower Not available.

Upper Not available.

Solubility(ies) Water solubility: dispersible

Other Decomposes on heating. Potential for exothermic hazard Combustibility index for deposited dust : 4 (22 °C) Dust explosion properties : KSt value: 149 bar·m/s (Milled sample, Median value of the tested sample 0.154 mm, Loss on drying 1.6 %; ISO 6184)

Section 10: Stability and Reactivity

Reactivity No hazards to be specially mentioned.

Chemical Stability Stable under recommended storage conditions.

Hazardous Polymerization Possibility of hazardous reac- : Dust may form explosive mixture in air.

Conditions to Avoid Excess heat

Incompatible Materials Strong acids and strong bases.Strong oxidizing agents

Hazardous Decomposition Products Carbon oxides Nitrogen oxides (NOx)

Section 11: Toxicological Information

RTECS FI0329500

Acute Toxicity

Acute toxicity estimate : > 5,000 mg/kg (Calculation method)

Skin Corrosion/Irritation

May cause skin irritation and/or dermatitis.

Serious Eye Damage/Irritation

β,β-carotene Eye irritation (In vitro study, OECD Test Guideline 492)

Respiratory or Skin Sensitization

Does not cause skin sensitisation

Germ Cell Mutagenicity

No indication for mutagenicity known

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, OSHA, NTP

Reproductive Toxicity

No indication for adverse effects on fertility known.

Routes of Entry

Inhalation. Ingestion.



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Beta Carotene Beadlets 10% WS (167 IU/mg)

30-2356

Symptoms Related to Exposure

Not available.

Potential Health Effects

May cause eye irritation. May cause skin discolorations.

Target Organ(s)

Not available.

Section 12: Ecological Information

Ecotoxicity

Toxicity to fish 6-O-palmitoylascorbic acid : Salmo gairdneri (rainbow trout) LC50 (96 h) 51 mg/l suspension

Persistence and Degradability

β,β-carotene: Biodegradable 6-O-palmitoylascorbic acid: Inherently biodegradable.48 % (28 d)(OECD Test Guideline 302C)suspension 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2Hbenzopyran-6-ol: Not readily biodegradable.8 % (28 d) (OECD Test Guideline 301F)

Bioaccumulative Potential

Not available.

Mobility in Soil

Not available.

Other Adverse Effects

Regulation Remarks:40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I SubstancesThis product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). Additional ecological information: There is no data available for this product.

Section 13: Disposal Considerations

Waste Disposal

Waste from residues : User must determine if any wastes generated exhibit hazardous characteristics as per 40 CFR Part 261 or other national /local legislation. Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Offer surplus and non-recyclable solutions to a licensed disposal company.

Disposal of Container

Dispose of as unused product. Do not re-use empty containers.

Other Considerations

Not available.

Section 14: Transport Information

DOT Classification

DOT Not a DOT controlled material (United States). This material is not classified dangerous good according to international transportation regulations (ADR/RID-IMDG-ICAO/IATA).

Section 15: Regulatory Information

Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312). Components present in this product at a level which could require reporting under the statute are: NONE Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual report release of toxic chemicals that appear in 40 CFR 372 (used for SARA 313). This information must be included in all MSDSs that are copied and distributed for this material. Components present in this product at a level which could require reporting under the statute are: NONE;Pennsylvania Right-To-Know, Hazardous substance List, Hazardous Substances and Special hazardous Substances on the list must be identified when present in products. Components present in this product at a level which could require reporting under the statute are: NONE Massachusetts Right-To-Know, Substance List (MSL) Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products. Components present in this product at a level which could require reporting under the statute are: NONE Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of Hazardous Substances equal or greater than the reportable quantities (RQs) in 40 CFR 302.4. Components present in this product at a level which could require reporting under the statute are: NONE



Safety Data Sheet

30-2356

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Other

WHMIS Not controlled under WHMIS (Canada). (Canada);DSCL (EEC) This product is not classified according to the EU regulations.;Gloves.;Lab coat.;Dust respirator. Be sure to use an approved/certified respirator or equivalent.;Safety glasses.

Section 16: Other Information

Not available.