

According to regulation (EC) No 1907/2006

Revision date 02/2016

## SECTION 1: Identification

### 1.1. Identification

Product Name: Grapefruit seed extract (GSE)  
CAS #: RN 90045-43-5

### 1.2. Recommended use and restrictions on use

Recommended Use: Preservative in cosmetic formulations.

### 1.3. Supplier

Camden-Grey Essential Oils, Inc.  
5751 Halifax Ave., Unit 2  
Fort Myers, FL 33912  
[www.camdengrey.com](http://www.camdengrey.com)

### 1.4. Emergency telephone number

Emergency number: Chemtrec -1.800.424.9300/ 1.703.527.3887 CCN330

## SECTION 2: Hazard(s) identification

Hazard classification of the chemical: Non-Flammable, Non-Toxic, Non-Hazardous  
Signal Word: N/A  
Pictograms: N/A  
Precautionary Statement: Eyes: Severe eye irritation if used directly  
Skin: Avoid prolonged contact at full strength due to low pH of product  
Inhalation: Avoid breathing vapor at full strength if heated Ingestion: DO NOT INGEST. NOT FOR HUMAN CONSUMPTION  
Description of any hazards not otherwise classified: N/A

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Chemical Name: Citrus Granáis (Grapefruit) Seed Extract  
Common Name and synonyms: Grapefruit Seed Extract  
CAS#: RN 90045-43-5  
Impurities and stabilizing additives, which are themselves classified and which contribute to the classification of the chemical: Ascorbic acid (CAS# 50-81-7)  
Mixtures: N/A

## SECTION 4: First-aid measures

This section describes the initial care that should be given by untrained responders to an individual who has been exposed to the chemical. The required information consists of:

### Necessary first-aid instructions by relevant routes of exposure (inhalation, skin and eye contact, ingestion)

Inhalation: Remove individual to fresh air. Proper ventilation is suggested for persons that are allergic or sensitive. Keep container closed when not in use.  
Skin contact: Rinse with large amounts of water.  
Eye contact: Flush with large amounts of water. Get medical attention.  
Ingestion: If swallowed DO NOT INDUCE VOMITING. Give milk and / or egg whites beaten in water. Avoid all alcohol. Call a physician at once.

### Description of the most important symptoms or effects, and any symptoms that are acute or delayed.

Inhalation: Shortness of breath. Should be restored with fresh air.  
Skin contact: Prolonged contact could result in burning due to the low PH of the product. Treat as a chemical burn.  
Eye contact: Severe eye irritation can occur if used directly. Seek medical attention immediately.  
Ingestion: DO NOT INGEST! NOT FOR HUMAN CONSUMPTION.

Recommendations for immediate medical care and special treatment needed, when necessary: N/A

## SECTION 5: Fire-fighting measures

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This section provides recommendations for fighting a fire caused by the chemical. The required information consists of:

### Recommendations of suitable extinguishing equipment, and information about extinguishing equipment that is not appropriate for a situation.

Flash point: 292 deg F  
Extinguishing media: Foam, water fog, carbon dioxide, or dry chemical

### Advice on specific hazards that develop from the chemical during the fire, such as any hazardous combustion products created when the chemical burns.

Fire-fighting procedures: Water of foam may cause frothing, which can be violent and possibly endanger the fire fighter, especially if sprayed into containers of hot, burning liquid. Wear self-contained breathing apparatus with a full-face piece operated in the positive pressure demand mode when fighting fires.  
Unusual Fire & Explosion Hazards: Never use welding torch or cutting torch on / near drum. Residue may ignite.

### Recommendations on special protective equipment or precautions for firefighters.

All protective equipment and precautions are mentioned in the previous subsections.

## SECTION 6: Accidental release measures

This section provides recommendations on the appropriate response to spills, leaks, or releases, including containment and cleanup practices to prevent or minimize exposure to people, properties, or the environment. The required information may consist of recommendations for:

### Use of personal precautions (such as removal of ignition sources or providing sufficient ventilation) and protective equipment to prevent the contamination of skin, eyes, and clothing

Avoid contacting other materials. Avoid strong oxidizing agents.

### Emergency procedures, including instructions for evacuations, consulting experts when needed, and appropriate protective clothing.

Grapefruit seed extract (GSE) is classified as a non-corrosive liquid. Reasonable and prudent care should be exercised during any cleanup efforts.

### Methods and materials used for containment.

Avoid contact with other materials. Containment will occur along with cleanup procedures.

### Cleanup procedures.

Avoid contacting other materials. All spills should be absorbed with sawdust, sand, paper towels, or an equivalent absorbent. The absorbent materials should then be removed and incinerated. Final treatment of the area should be cleaned with soap and water.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid contact with strong oxidizing agents. Use reasonable care when handling.  
Eating, drinking, and smoking near product should be prohibited.

### 7.2. Conditions for safe storage, including any incompatibilities

Avoid contact with strong oxidizing agents. Store upright in a cool, dry place.

## SECTION 8: Exposure controls/personal protection

This section indicates the exposure limits, engineering controls, and personal protective measures that can be used to minimize worker exposure. The required information consists of:

### OSHA Permissible Exposure Limits (PELs), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.

OSHA PEL Total Dust: 15 mg / m<sup>3</sup>  
OSHA PEL Respirable fraction 5 mg / m<sup>3</sup>

### Appropriate engineering controls (e.g., use local exhaust ventilation, or use only an enclosed system).

Provide sufficient mechanical (general and / or local exhaust) ventilation to avoid unhealthy exposure.

### Recommendations for personal protective measures to prevent illness or injury from exposure to chemicals, such as personal protective equipment (PPE) (e.g., appropriate types of eye, face skin or respiratory protection needed based on hazards and potential exposure).

A NIOSH / MSHA approved air supplied respirator is advised if prolonged exposure without proper ventilation is unavoidable. OSHA regulations also permit other NIOSH / MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Safety glasses and nitrile gloves are recommended to minimize exposure. Engineering or administrative controls should be implemented to reduce exposure.

### Any special requirements for PPE, protective clothing or respirators (e.g., type of glove material, such as PVC or nitrile rubber gloves; and breakthrough time of the glove material).

Nitrile gloves are recommended to avoid latex irritation

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

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Appearance (physical state, color, etc.): Viscous liquid. Yellow to golden brown.  
Upper/lower flammability or explosive limits: LEL & UEL Not Applicable.  
Odor: Slight citrus odor  
Vapor Pressure:

P in mm Hg	1	10	40	100	400	760
T in deg C	125.5	167.2	198.0	220.1	263.0	290.0

Odor Threshold: Not available  
Vapor Density: 3.17 (H<sub>2</sub>O=1)  
pH: 1.50 – 3.00  
Specific Gravity / Density: 1.10 – 1.30  
Melting / Freezing point: 20 deg F  
Solubility: Misc in water, insolubility in chloroform  
Boiling point: 290 deg C  
Flash point: 193 deg C / 379.4 deg F  
Evaporation rate: Not available  
Flammability (solid, gas): Not available  
Partition coefficient: n-octanol/water: Not available  
Auto-ignition temperature: 400 deg C / 752 deg F  
Decomposition temperature: 290 deg C  
Viscosity: Not available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Vapor mixes readily with air. Decomposes on exposure to temperature rise: release of toxic, corrosive, combustible gases / vapor. Upon combustion CO and CO<sub>2</sub> are formed. May polymerize on exposure to temperature rise. Reacts violently with (strong) oxidizers: (increased) risk of fire / explosion. Reacts with (some) acids: (increased) risk of fire / explosion.

### 10.2. Chemical stability

Hygroscopic. Otherwise stable under normal ambient temperatures and recommended conditions.

**Description of any stabilizers that may be needed to maintain chemical stability.**

Not Applicable

**Indication of any safety issues that may arise should the product change in physical appearance.**

None Known

### 10.3. Other

**Indication of the possibility of hazardous reactions, including a statement whether the chemical will react or polymerize, which could release excess pressure or heat, or create other hazardous conditions.**

Able to polymerize above 149 deg C. Decomposes when heated above 290 deg C.

**List of all conditions that should be avoided (e.g., static discharge, shock, vibrations, or environmental conditions that may lead to hazardous conditions).**

None known.

**List of all classes of incompatible materials (e.g., classes of chemicals or specific substances) with which the chemical could react to produce a hazardous situation.**

Reacts violently with strong oxidants

**List of any known or anticipated hazardous decomposition products that could be produced because of use, storage, or heating.**

Low toxicity in original state and not considered hazardous to human beings. On heating / burning: release of toxic / combustible gases / vapors.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact). The SDS should indicate if the information is unknown.**

Acute:  
Skin: Irritant when tested according to method 16 CFR 1500.41 (patch test).  
Eye: May cause slight transient (temporary) eye irritation.  
Oral: LD<sub>50</sub> in rats 5,000 mg / kg.  
Inhalation: LC<sub>50</sub> in rabbits 250 mg/m<sup>3</sup>

**Description of the delayed, immediate, or chronic effects from short- and long-term exposure.**

Chronic / other effects: None Observed

**The numerical measures of toxicity (e.g., acute toxicity estimates such as LD<sub>50</sub> (median lethal dose)) - the estimated amount (of a substance) expected to kill 50% of test animals in a single dose.**

See subsection 1 above: LD<sub>50</sub> in rats 5,000 mg / kg.

**Description of symptoms. This description includes the symptoms associated with exposure to the chemical including symptoms from the lowest to the most severe exposure.**

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Skin irritation / corrosion: Can be irritating to the skin.  
Eye irritation: Can be irritating to the eyes.  
Skin sensitization: Can be harmful if absorbed through skin.  
Respiratory irritation: Can be harmful if inhaled. Can be irritating to the respiratory tract.  
Avoid exposure to mist.

Indicate of whether the chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions) or found to be a potential carcinogen by OSHA.

Carcinogenicity: Not Carcinogenic  
Mutagenicity: Not Mutagenic

## SECTION 12: Ecological information

Ecological Information (non - mandatory)  
This section intentionally left blank

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Disposal Considerations (non — mandatory)  
This section intentionally left blank

## SECTION 14: Transport information

Transportation Information (non - mandatory)  
This section intentionally left blank

## SECTION 15: Regulatory information

Regulatory Information (non - mandatory)  
This section intentionally left blank

## SECTION 16: Other information

DISCLAIMER: The information in this SDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness and accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond Camden-Grey Essential Oils, Inc.'s control, it is the user's responsibility both to determine safe conditions for use of this product and to assume liability for loss, injury, damage or expense arising out of the product's improper use. No warranty, expressed or implied, regarding the product described herein shall be created by or inferred from any statement or omission in this SDS. Various government agencies (e.g. DOT, EPA, FDA) may have specific regulations concerning the transportation, handling, storage, use or disposal of this product, which may not be reflected in this SDS. The user should review these regulations to ensure full compliance.