Material Name: Sodium Erythorbate
ID: C1-164

**Section 1 - Chemical Product and Company Identification**

Chemical Name: Sodium Erythorbate (Technical, FCC)
Product Use: For Commercial Use

**RESTRICTIONS on USE**

NOT TO BE USED AS A PESTICIDE. THIS PRODUCT IS NOT TO BE USED IN VIOLATION OF ANY PATENTS. CHEM ONE LTD. DISCLAIMS ANY AND ALL WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR APPLICATION. IN NO EVENT SHALL CHEM ONE LTD. OR ITS SUPPLIERS BE LIABLE FOR ANY DAMAGES WHATSOEVER INCLUDING DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, LOSS OF BUSINESS PROFITS OR SPECIAL DAMAGES, EVEN IF CHEM ONE LTD. OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES SO THE FOREGOING LIMITATION MAY NOT APPLY.

**Supplier Information**

Chem One Ltd.   Phone: (713) 896-9966
14140 Westfair East Drive Fax: (713) 896-7540
Houston, Texas 77041-1104

Emergency # (800) 424-9300 or +1 (703) 527-3887

NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

**Section 2 - Hazards Identification**

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Classification of the substance or mixture: Not a hazardous substance or mixture.

Label elements, including precautionary statements: Not a hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS: CAUTION! MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR (DURING PROCESSING). MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE EYE AND SKIN IRRITATION.

**Section 3 - Composition/information on Ingredients**

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>6381-77-7</td>
<td>Sodium Erythorbate</td>
<td>&gt; 98</td>
</tr>
</tbody>
</table>

Synonyms: Sodium isoascorbate, Sodium salt of D-isoascorbic acid, Sodium salt of D-Araboascorbic acid, Sodium salt of Erythorbic acid

**Section 4 - First Aid Measures**

Emergency Overview
Sodium Erythorbate is a white, odorless solid, in granular or powder form. Dusts of this product may cause mild irritation to the eyes, skin, nose and throat. Sodium Erythorbate is not combustible. Although this compound has test data on the low probability of the hazard of dust explosion, as an organic solid, care should still be taken to prevent the accumulation of dusts. Use extinguishing media appropriate for surrounding fire. Thermal decomposition of this product produces irritating vapors and toxic gases (e.g. carbon monoxide and carbon dioxide). Emergency responders should wear proper personal protective equipment for the releases to which they are responding.

Hazard Statements
CAUTION! MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR (DURING PROCESSING). MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE EYE AND SKIN IRRITATION. Avoid contact with eyes and skin. Avoid breathing dusts. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. Keep containers closed.
Potential Health Effects: Eyes
Exposure to particulates or solution of this product may cause mild irritation of the eyes with symptoms such as stinging, tearing, redness and pain. Symptoms are generally alleviated when exposure ends.

Potential Health Effects: Skin
This product can cause slight irritation of the skin, especially after prolonged exposures. Repeated skin contact may lead to dermatitis (red, cracked skin). Symptoms are generally alleviated when exposure ends.

Potential Health Effects: Ingestion
Ingestion of this product (especially in large volumes) can irritate the tissues of the mouth, esophagus, and other tissues of the digestive system. Symptoms of exposure can include vomiting, diarrhea, and nausea.

Potential Health Effects: Inhalation
Breathing dusts or particulates generated by this product can lead to irritation of the nose, throat or respiratory system. Symptoms of such exposure could include coughing, sneezing, and chest discomfort. Symptoms are generally alleviated when exposure ends.

First Aid: Eyes
In case of contact with eyes, rinse immediately with plenty of water for at least 20 minutes. Seek immediate medical attention.

First Aid: Skin
Remove all contaminated clothing. For skin contact, wash thoroughly with soap and water for at least 20 minutes. Seek immediate medical attention if irritation develops or persists. Completely decontaminate clothing, shoes, and leather goods before reuse.

First Aid: Ingestion
Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Immediately give large amounts of water. If vomiting occurs naturally, rinse mouth and repeat administration of water. Obtain medical advice immediately. Never give anything by mouth to a victim who is unconscious or having convulsions.

First Aid: Inhalation
Remove source of contamination or move victim to fresh air. Apply artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult. Get immediate medical attention.

First Aid: Notes to Physician
Provide general supportive measures and treat symptomatically.

General Fire Hazards
Sodium Erythorbate may burn but does not ignite readily. This compound has been tested by the Bureau of Mines Relative Hazard Rating and has been found to have no explosion detected at dust levels up to 200 g/ft³. Prudent practice would be to minimize potential explosion hazard by controlling dusts. When involved in a fire, this material may decompose and produce irritating vapors, acrid smoke and toxic gases, including carbon monoxide and carbon dioxide. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for comprehensive guidance.

Hazardous Combustion Products
Carbon monoxide and carbon dioxide.

Extinguishing Media
Use methods for the surrounding fire including water spray, dry chemical, carbon dioxide, or foam.

Fire Fighting Equipment/Instructions
Firefighters should wear full protective clothing including self-contained breathing apparatus. If possible control runoff from fire control or dilution water to prevent environmental contamination.
**Safety Data Sheet**

**Material Name: Sodium Erythorbate**

**ID: C1-164**

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### Section 5 - Fire Fighting Measures Cont.

**NFPA Ratings:**
- **Health Hazard:** 1
- **Fire Hazard:** 1
- **Physical Hazard:** 0
- **Personal Protective Equipment:**

**Hazard Scale:**
- 0 = Minimal
- 1 = Slight
- 2 = Moderate
- 3 = Serious
- 4 = Severe
- * = Chronic hazard

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### Section 6 - Accidental Release Measures

**Containment Procedures**

Stop the flow of material, if this can be done without risk. Contain the discharged material. If sweeping of a contaminated area is necessary use a dust suppressant agent, which does not react with product (see Section 10 for incompatibility information).

**Clean-Up Procedures**

Small releases can be cleaned-up wearing gloves, goggles and suitable body protection. In case of a large spill (in which excessive dusts can be generated), clear the affected area, protect people, and respond with trained personnel. If a vacuum is used for spill clean-up, only an explosion-proof vacuum should be used, due to the possibility for dust explosion. Do not allow the spilled product to enter public drainage system or open water courses. Place all spill residues in an appropriate container and seal. Thoroughly wash the area after a spill or leak clean-up. Avoid contamination of soil, and prevent spill residue from running to groundwater or storm drains.

**Evacuation Procedures**

Evacuate the area promptly and keep upwind of the spilled material. Isolate the spill area to prevent people from entering. In case of large spills, follow all facility emergency response procedures.

**Special Procedures**

Remove soiled clothing and launder before reuse. Avoid all skin contact with the spilled material. Have emergency equipment readily available.

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### Section 7 - Handling and Storage

**Handling Procedures**

All employees who handle this material should be trained to handle it safely. Do not breathe dust. Avoid all contact with skin and eyes. Wherever dust clouds may be generated, eliminate sparks, flames and other ignition sources. Use this product only with adequate ventilation. Areas in which this compound is used should be wiped down periodically so that this substance is not allowed to accumulate. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Wash thoroughly after handling.

**Storage Procedures**

Keep container tightly closed when not in use. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Store containers away from incompatible chemicals (see Section 10, Stability and Reactivity). Storage areas should be made of fire-resistant materials. Post warning and “NO SMOKING” signs in storage and use areas, as appropriate. Refer to NFPA 654, *Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids* for additional information on storage. Containers of this material should be separated from oxygen, or other oxidizers, by a minimum distance of 20 ft., or by a barrier of non-combustible material at least 5 ft. high, having a fire-resistance rating of at least 0.5 hours. Additional information can be found in the OSHA Safety and Health Information Bulletin: *Combustible Dust in Industry: Preventing and Mitigating the Effects of Fire and Explosions*. Use only appropriately classified electrical equipment and powered industrial trucks. Use corrosion-resistant structural materials, lighting, and ventilation systems in the storage area. Floors should be sealed to prevent absorption of this material. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Have appropriate extinguishing equipment in the storage area (i.e., sprinkler system, portable fire extinguishers). Empty containers may contain residual particulates; therefore, empty containers should be handled with care. Do not store this material in open or unlabeled containers. Limit quantity of material stored.

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Exposure Guidelines

A: General Product Information

Follow the applicable exposure limits. Use a non-sparking, grounded, explosion-proof ventilation system separate from other exhaust ventilation systems. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

B: Component Exposure Limits

ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components. The exposure limits given are for Particulates Not Otherwise Classified (PNOC).

OSHA: 15 mg/m³ TWA (Total dust)
      5 mg/m³ TWA (Respirable fraction)
DFG MAKs: 4 mg/m³ TWA (Inhalable fraction)
          1.5 mg/m³ TWA (Respirable fraction)

Engineering Controls

Use engineering methods to control hazardous conditions. This includes exhaust ventilation directly to the outside and using a corrosion-resistant ventilation system separate from other exhaust ventilation systems.

PERSONAL PROTECTIVE EQUIPMENT

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132). Please reference applicable regulations and standards for relevant details.

Personal Protective Equipment: Eyes/Face

Wear chemical safety goggles. If necessary, refer to U.S. OSHA 29 CFR 1910.133.

Personal Protective Equipment: Skin

Use impervious gloves. Gloves should be tested to determine their suitability for prolonged contact with this material. If necessary, refer to U.S. OSHA 29 CFR 1910.138.

Personal Protective Equipment: Respiratory

None required where adequate ventilation conditions exist. If airborne concentration is high, use an appropriate respirator or dust mask. If airborne concentrations are above the applicable exposure limits, use NIOSH-approved respiratory protection. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. State regulations. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA’s Respiratory Protection Standard (1910.134-1998).

Personal Protective Equipment: General

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Protective Clothing Pictograms:

- Splash Goggles
- Gloves
- Protective Apron
- Dust Respirator
**Section 9 - Physical & Chemical Properties**

The data provided in this section are to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

- **Appearance:** White granules or powder
- **Odor:** Odorless
- **pH:** 5-8 (10% solution)
- **Vapor Pressure:** Zero
- **Vapor Density:** Not applicable
- **Boiling Point:** Not applicable
- **Freezing Melting Point:** Decomposes at 154-164°C (309.2-327.2°F)
- **Solubility (H2O):** 15 g/100 g water
- **Specific Gravity:** 1.2 (H2O = 1)
- **Softening Point:** Not applicable
- **Particle Size:** Not determined
- **Molecular Weight:** 216.12
- **Bulk Density:** Not available
- **Chemical Formula:** C6H7NaO6\(\cdot\)H2O

**Section 10 - Chemical Stability & Reactivity Information**

Stable under conditions of standard temperature and pressure. Sodium Erythorbate may be sensitive to prolonged exposure to light.

**Chemical Stability: Conditions to Avoid**

- Avoid high temperatures, and incompatible materials.

**Incompatibility**

Sodium Erythorbate is incompatible with strong oxidizers.

**Hazardous Decomposition**

Carbon Monoxide and carbon dioxide.

**Hazardous Polymerization**

Will not occur.

**Section 11 - Toxicological Information**

**A: General Product Information**

- Standard Draize Test (Skin-Rabbit) 100 mg: Mild
- May cause eye, skin, nose, throat, and respiratory tract irritation.
- Chronic: Long term skin overexposure to this product may lead to dermatitis (red, itchy skin).

**B: Component Analysis - LD50/LC50**

- **Sodium Erythorbate:**
  - **LD50 (Oral-Rat):** > 5 gm/kg: Gastrointestinal: hypermotility, diarrhea

**B: Component Analysis - TDLo/LDLo**

- **TDLo (Oral-Mouse):** 350 mL/kg/10 weeks-continuous: Liver: other changes; Kidney, Ureter, Bladder: changes in tubules (including acute renal failure, acute tubular necrosis); Blood: changes in spleen

**Carcinogenicity**

- **A: General Product Information**
  - Sodium Erythorbate is not considered carcinogenic by ACGIH, IARC, NIOSH, NTP, or OSHA.
B: Component Carcinogenicity
   No information available.

Epidemiology
   No information available.

Neurotoxicity
   No information available.

Mutagenicity
   No information available.

Teratogenicity
   No information available.

Other Toxicological Information
   No information available.

*** Section 12 - Ecological Information ***

Ecotoxicity
   A: General Product Information
      No information available.

   B: Aquatic Toxicity
      No information available.

Environmental Fate
   Product is not expected to accumulate in the food chain.

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions
   A: General Product Information
      As shipped, product is not considered a hazardous waste by the EPA.

   B: Component Waste Numbers
      No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions
   All wastes must be handled in accordance with local, state and federal regulations or with. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.
**Section 14 - Transportation Information**

NOTE: The shipping classification information in this section (Section 14) is meant as a guide to the overall classification of the product. However, transportation classifications may be subject to change with changes in package size. Consult shipper requirements under I.M.O., I.C.A.O. (I.A.T.A.) and 49 CFR to assure regulatory compliance.

**US DOT Information**
- **Shipping Name:** Not applicable.
- **Hazard Class:** Not applicable
- **UN/NA #:** Not applicable
- **Packing Group:** Not applicable
- **Required Label(s):** Not applicable
- **RQ Quantity:** Not applicable

**International Air Transport Association (IATA):**
For Shipments by Air transport: Not considered hazardous.

**International Maritime Organization (I.M.O.) Classification**
- **I.M.O. Classification:** Not considered hazardous under IMDG/ I.M.O. regulations.

### Section 15 - Regulatory Information

**US Federal Regulations**
- **A: General Product Information**
  No additional information.

- **B: Component Analysis**
  Sodium Erythorbate is not listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).
  SARA 302 There are no specific Threshold Planning Quantities for Sodium Erythorbate. The default Federal MSDS submission (EHS TPQ) and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

  **C: Sara 311/312 Tier II Hazard Ratings:**
  
<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Fire Hazard</th>
<th>Reactivity Hazard</th>
<th>Pressure Hazard</th>
<th>Immediate Health Hazard</th>
<th>Chronic Health Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Erythorbate</td>
<td>6381-77-7</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**State Regulations**
- **A: General Product Information**
  **California Proposition 65**
  Sodium Erythorbate is not on the California Proposition 65 chemical lists.

- **B: Component Analysis - State**
  The following components appear on one or more of the following state hazardous substance lists:
  
<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>CA</th>
<th>FL</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
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<td>Sodium Erythorbate</td>
<td>6381-77-7</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Other Regulations**
- **A: General Product Information**
  No other information available.

- **B: Component Analysis - Inventory**
  
<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>DSL</th>
<th>EINECS</th>
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<tr>
<td>Sodium Erythorbate</td>
<td>6381-77-7</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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C: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Erythorbate</td>
<td>6381-77-7</td>
<td>No disclosure limit</td>
</tr>
</tbody>
</table>

ANSI LABELING (Z129.1):

**CAUTION! MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR (DURING PROCESSING). MAY CAUSE SKIN AND EYE IRRITATION. Avoid contact with skin, eyes, or clothing. Do not taste or swallow. Avoid breathing dusts and particulates. Use only with adequate ventilation. Keep container tightly closed. Use only with adequate ventilation. Keep away from heat or flame. Keep container closed and grounded. Prevent dust accumulations to minimize explosion hazard. Wash thoroughly after handling. Wear gloves, goggles, face shields, suitable body protection, and NIOSH-approved respiratory protection, as appropriate.**

**FIRST-AID:** In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If inhaled, remove to fresh air. If ingested, do not induce vomiting. Get medical attention. **IN CASE OF FIRE:** Use water fog, dry chemical, CO₂, or “alcohol” foam. **IN CASE OF SPILL:** Absorb spill with inert material. Place residue in suitable container. Consult Material Safety Data Sheet for additional information.

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**Section 16 - Other Information**

Other Information

Chem One Ltd. ("Chem One") shall not be responsible for the use of any information, product, method, or apparatus herein presented ("Information"), and you must make your own determination as to its suitability and completeness for your own use, for the protection of the environment, and for health and safety purposes. You assume the entire risk of relying on this Information. In no event shall Chem One be responsible for damages of any nature whatsoever resulting from the use of this product or products, or reliance upon this Information. By providing this Information, Chem One neither can nor intends to control the method or manner by which you use, handle, store, or transport Chem One products. If any materials are mentioned that are not Chem One products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed. Chem One makes no representations or warranties, either express or implied of merchantability, fitness for a particular purpose or of any other nature regarding this information, and nothing herein waives any of Chem One's conditions of sale. This information could include technical inaccuracies or typographical errors. Chem One may make improvements and/or changes in the product(s) and/or the program(s) described in this information at any time. If you have any questions, please contact us at Tel. 713-896-9966 or E-mail us at Safety@chemone.com.

Key/Legend

- EPA = Environmental Protection Agency
- TSCA = Toxic Substance Control Act
- ACGIH = American Conference of Governmental Industrial Hygienists
- IARC = International Agency for Research on Cancer
- NIOSH = National Institute for Occupational Safety and Health
- NTP = National Toxicology Program
- OSHA = Occupational Safety and Health Administration

Contact: Sue Palmer-Koleman, PhD  
Contact Phone: (713) 896-9966
Safety Data Sheet

Material Name: Sodium Erythorbate

ID: C1-164

Revision Log

08/28/00 4:16 PM SEP Changed company name, Sect 1 and 16, from Corporation to Ltd.
06/02/01 9:31 AM HDF Checked exposure limits; made changes to Sect 9; overall review, add SARA 311/312 Haz Ratings.
08/20/01 4:05 PM CLJ Add Shipments by Air information to Section 14, Changed contact to Sue, non-800 Chemtrec Num.
02/18/03 11:13 AM HDF Up-date of SARA Hazard Ratings
09/28/03: 11:20 AM HDF General review and up-date of entire MSDS. Removed “Monohydrate” from name (not a recognized name) Up-graded Section 10 Reactivity Information. Up-date of HMIS categories. Up-date of Section 8. Up-date of toxicity data, Section 11. Up-date of Section 14.
06/22/05 10:41 AM SEP Update IATA Section 14
10/22/07 3:17 PM SEP Update IATA Section 14
10/15/08 9:31 AM DLY Changed Chem One Physical Address, Section 1
06/17/10 SEP Update IATA and air/dust explosion hazard
04/03/14 SEP Add to synonyms “Sodium Salt of...” , Section 1
02/02/2015 GHS Revision ass sections
This is the end of MSDS #: C1-164

Revised By:
SJC Compliance Education, Inc.
16516 El Camino Real Suite 417
Houston TX 77062

09/27/2018 Melanie Koch added NFPA section no other changes were made.