



Material Safety Data Sheet

SODIUM PERCARBONATE

1. Chemical Product and Supplier Identification

Product Name: ® Sodium Percarbonate **Chemical Name:** Sodium Carbonate Peroxyhydrate

Synonyms: PCS, Sodium Percarbonate, Sodium Carbonate Peroxide

Shangyu Chemical Industry Corp..

Korea: Chemsfield Korea Inc. Tel: 82-31-918-0652

Suite 712 Daewoo City Plaza 115 Juyop Dong, Ilsan-Ku, Koyang-Si, Kyungki-Do, Korea

USA: Kingsfield Inc. Shangyu Chemical USA Corp.

Tel: 201-767-0414 184 Central Ave. Suite 100 Old Tappan, NJ 07675

Effective Date: March 1, 2001

2. Composition/Information on Ingredients

Components Formula CAS No. Percent

Sodium Carbonate Peroxyhydrate $2\text{Na}_2\text{CO}_3 \cdot 3\text{H}_2\text{O}_2$ 15630-89-4 > 85

Sodium Carbonate Na_2CO_3 497-19-8 12.7 approx.

Sodium Metasilicate Na_2SiO_3 6834-92-0 1.4 approx.

3. Hazards Identification

Emergency overview: Toxicity effects principally related to its irritating properties.

Does not present any significant hazard for the environment.

Supports combustion of other substances (oxidizing product).

Potential health effects

General: Irritating to mucous membrane, eyes and skin.

Inhalation: Slight nose and throat irritation. At high concentrations, cough. In case of repeated or prolonged exposure: risk of sore throat, nose bleeds, chronic bronchitis.

Eye contact: Severe eye irritation, watering and redness, can cause burns to the eye. Risk of serious or permanent eye lesions.

Skin contact: Slight irritation. In case of repeated contact: risk of dermatitis.

Ingestion: Severe irritation of the mouth, throat, esophagus and stomach. Bloating of stomach, belching. Nausea, vomiting and diarrhea.



4. First-Aid Measures

General Recommendations: Do not dry soiled clothing near an open flame or incandescent heat source.

Inhalation: Remove the subject from dusty environment. Consult with a physician in case of respiratory symptoms.

Eye contact: Flush eyes with running water for 15 minutes, while keeping the eyelids wide open. Consult with an ophthalmologist in all cases.

Skin contact: Remove contaminated shoes, socks and clothing; wash the affected skin with running water. Clean clothing. Consult a physician in case of persistent pain or redness.

Ingestion: Consult with a physician in all cases. If the subject is completely conscious, rinse mouth and administer fresh water. Do not induce vomiting. If the subject is unconscious, loosen collar and tight clothing, lay the victim on his/her left side, give nothing by mouth. Keep warm with blanket. Do not induce vomiting.

5. Fire-Fighting Measures

Flash Point: Not applicable **Flammability:** Non-flammable

Auto-ignition temperature: Not applicable **Danger of explosion:** Non-explosive

Common extinguishing methods: Water

Specific hazards: Oxidizing substance. Oxygen released on exothermic decomposition may support combustion.

Pressure burst may occur due to decomposition in confined spaces or containers. Wet product decomposes exothermically and may cause combustion of organic materials.

Fire fighting instructions: Evacuate all non-essential personnel. Personnel should wear normal protective equipment (full bunker gear) and positive pressure self-contained breathing apparatus. Intervention only by capable personnel who are trained and aware of the hazards of the product. If safe to do so, remove unaffected product to a safe area.

6. Accidental Release Measures

Precautions: Observe the protection measures given in sections 5 and 8. Avoid materials and products which are incompatible with the product (see section 10). Avoid direct contact of the product with water.

Cleanup methods: Collect the product with suitable means, shovel or sweep, avoiding dust formation. All receiving equipment should be clean, dry, vented, labeled and made of material that is compatible with the product. Do not return spilled or contaminated material to inventory. Clean the area with large quantities of water. For disposal methods, refer to section 13.

7. Handling and Storage

Handling: Clean and dry process piping and equipment before using this product. Never return unused product to original storage container. Keep away from incompatible products. Containers and equipment used to handle the product should be exclusively for that product. Avoid any contact with water or humidity. For more information, consult the supplier.



Storage: In a dry area. Protect from direct sunlight. Keep away from heat sources. Keep away from reactive products (see section 10). Store in vented containers. Store at temperatures less than 40°C (104°F)

8. Physical and Chemical Properties

Appearance: White granular solid. **Odor:** None. **Bulk Density:** 1.0 - 1.2 g/cm³

Solubility: 140 g/L @ 24 °C (75 °F) **pH, 1% solution:** 10.4 - 10.6

Decomposition Temperature: Self-accelerating decomposition with oxygen release starting from 50 °C (122 °F)

9. Stability and Reactivity

Stability: Stable, under certain conditions (see below).

Conditions to avoid: Heat / Sources of heat. Moisture.

Materials to avoid: Water. Acids. Bases. Salts of heavy metals. Reducing agents. Organic materials. Flammable substances.

Hazardous decomposition products: Oxygen.

Other information: Decomposition releases steam / heat.

10. Toxicological Information

Acute toxicity: Oral route - LD50, rat (combined sexes), 1034 mg/kg.
Dermal route - LDLo, rabbit, > 2000 mg/kg. Inhalation, LC0, 1 hour, rat, > 4580 mg/m³.

Irritation: Eyes, severe damage, rabbit. Skin, slightly irritating, rabbit.

Sensitization: No sensitization was noted when administered as a 75% w/v mixture during induction and as a 25% w/v mixture at challenge.

Comments: Toxic effect linked with irritant properties

11. Disposal Considerations

Waste treatment: Dispose of in an approved waste facility operated by an authorized contractor in compliance with federal, state and local regulations.

Packaging treatment: The empty and clean containers are to be recycled or disposed of in conformity with local regulations.

12. Transport Information

D.O.T. Proper Shipping Name: Oxidizing solid, n.o.s., (sodium carbonate peroxyhydrate)

UN Number: UN1479

Hazard Class: 5.1

Label(s): 5.1 (Oxidizer)

Packing Group: III