



# Material Safety Data Sheet

## Section 1. Product and Company Identification

<b>Product Name</b>	Sodium Perchlorate	<b>Product Code</b>	SX0692
<b>Manufacturer</b>	EMD Chemicals Inc. P.O. Box 70 480 Democrat Road Gibbstown, NJ 08027 Prior to January 1, 2003 EMD Chemicals Inc. was EM Industries, Inc. or EM Science, Division of EM Industries, Inc.	<b>Effective Date</b>	2/27/2006
		<b>Print Date</b>	3/13/2006

### For More Information Call

856-423-6300 Technical Service  
Monday-Friday: 8:00 AM - 5:00 PM

### In Case of Emergency Call

800-424-9300 CHEMTREC (USA)  
613-996-6666 CANUTEC (Canada)  
24 Hours/Day: 7 Days/Week

**Synonym** PERCHLORIC ACID SODIUM SALT

**Material Uses** Analytical reagent.

**Chemical Family** Salt.

## Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
Sodium Perchlorate	7601-89-0	100

## Section 3. Hazards Identification

**Physical State and Appearance** Solid. (Deliquescent crystals solid.)

**Emergency Overview** DANGER!  
STRONG OXIDIZER.  
CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE.  
HARMFUL IF SWALLOWED.  
CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION.  
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:  
RESPIRATORY TRACT, SKIN, EYE, LENS OR CORNEA.

**Routes of Entry** Inhalation. Ingestion.

### Potential Acute Health Effects

**Eyes** Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

**Skin** Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

**Inhalation** Hazardous in case of inhalation (lung irritant).

**Ingestion** Hazardous in case of ingestion. Ingestion can cause nausea and vomiting.

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**Potential Chronic Health Effects**

**Carcinogenic Effects** This material is not known to cause cancer in animals or humans.

Additional information See Toxicological Information (section 11)

**Medical Conditions****Aggravated by****Overexposure:**

Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

**Section 4. First Aid Measures****Eye Contact**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

**Skin Contact**

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

**Inhalation**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Ingestion**

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

**Section 5. Fire Fighting Measures****Flammability of the Product**

Non-flammable.

**Auto-ignition Temperature**

Not applicable.

**Flash Points**

Not applicable.

**Flammable Limits**

Not applicable.

**Products of Combustion**

Not available.

**Fire Hazards in Presence of Various Substances**

Not applicable.

**Explosion Hazards in Presence of Various Substances**

Risks of explosion of the product in presence of static discharge: No.

Risks of explosion of the product in presence of mechanical impact: No.

**Fire Fighting Media and Instructions**

Not applicable.

**Protective Clothing (Fire)**

Not applicable.

**Special Remarks on Fire Hazards**

Not available.

**Special Remarks on Explosion Hazards**

Not available.

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**Section 6. Accidental Release Measures**

<b>Small Spill and Leak</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
<b>Large Spill and Leak</b>	Stop leak if without risk. Do not get water inside container. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.
<b>Spill Kit Information</b>	No specific spill kit required for this product.

**Section 7. Handling and Storage**

<b>Handling</b>	Store in tightly closed container. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Do not ingest.
<b>Storage</b>	Keep container in a cool, well-ventilated area. Separate from acids, alkalies, reducing agents and combustibles.

**Section 8. Exposure Controls/Personal Protection**

<b>Engineering Controls</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
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**Personal Protection**

**Eyes** Splash goggles.

**Body** Lab coat.

**Respiratory** Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

**Hands** Gloves.

**Feet** Not applicable.

**Protective Clothing  
(Pictograms)**

<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
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<b>Product Name</b>	<b>Exposure Limits</b>
Sodium Perchlorate	Not available.

**Section 9. Physical and Chemical Properties**

<b>Odor</b>	Odorless.
<b>Color</b>	White.
<b>Physical State and Appearance</b>	Solid. (Deliquescent crystals solid.)
<b>Molecular Weight</b>	122.44 g/mole
<b>Molecular Formula</b>	NaClO <sub>4</sub>

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pH Not available.

Boiling/Condensation Point Not available.

Melting/Freezing Point Not available.

Specific Gravity Not available.

Vapor Pressure Not available.

Vapor Density Not available.

Odor Threshold Not available.

Evaporation Rate Not available.

LogK<sub>ow</sub> Not available.

Solubility Soluble in water.

### Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Conditions of Instability Not available.

Incompatibility with Various Substances Highly reactive with combustible materials, organic materials.  
Reactive with acids.  
Rem/Incompatibility Not available.

Hazardous Decomposition Products Na<sub>2</sub>O , Chlorine.

Hazardous Polymerization Will not occur.

### Section 11. Toxicological Information

RTECS Number: Sodium Perchlorate SC9800000

Toxicity Acute oral toxicity (LD<sub>50</sub>): 2100 mg/kg [Rat].

Chronic Effects on Humans Not available.

Acute Effects on Humans Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching. Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Hazardous in case of inhalation (lung irritant). Hazardous in case of ingestion.

Synergetic Products (Toxicologically) Not available.

Irritancy Draize Test: Not available.

Sensitization Not available.

Carcinogenic Effects This material is not known to cause cancer in animals or humans.

Toxicity to Reproductive System Not available.

Teratogenic Effects Not available.

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**Mutagenic Effects** Tests on laboratory animals for mutagenic effects are cited in Registry of Toxic Effects of Chemical Substances (RTECS).

### Section 12. Ecological Information

**Ecotoxicity** Not available.

**BOD5 and COD** Not available.

**Toxicity of the Products of Biodegradation** The products of degradation are less toxic than the product itself.

### Section 13. Disposal Considerations

**EPA Waste Number** D001

**Treatment** Specified Technology - Contact your local permitted waste disposal site (TSD) for permissible treatment sites. Always contact a permitted waste disposal (TSD) to assure compliance with all current local, state, and Federal Regulations..

### Section 14. Transport Information

**DOT Classification** Proper Shipping Name: SODIUM PERCHLORATE  
Hazard Class: 5.1  
UN number: UN1502  
Packing Group: II  
RQ: Not applicable.

**TDG Classification** Not available.

**IMO/IMDG Classification** Proper Shipping Name: SODIUM PERCHLORATE  
Hazard Class: 5.1  
UN number: UN1502  
Packing Group: II  
RQ: Not applicable.

**ICAO/IATA Classification** Proper Shipping Name: SODIUM PERCHLORATE  
Hazard Class: 5.1  
UN number: UN1502  
Packing Group: II  
RQ: Not applicable.

### Section 15. Regulatory Information

**U.S. Federal Regulations** TSCA 8(b) inventory: Sodium Perchlorate  
SARA 302/304/311/312 extremely hazardous substances: No products were found.  
SARA 302/304 emergency planning and notification: No products were found.  
SARA 302/304/311/312 hazardous chemicals: Sodium Perchlorate  
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Sodium Perchlorate: Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard  
SARA 313 toxic chemical notification and release reporting: No products were found.  
Clean Water Act (CWA) 307: No products were found.  
Clean Water Act (CWA) 311: No products were found.  
Clean air act (CAA) 112 accidental release prevention: No products were found.  
Clean air act (CAA) 112 regulated flammable substances: No products were found.  
Clean air act (CAA) 112 regulated toxic substances: No products were found.

**WHMIS (Canada)** WHMIS Class C: Oxidizing material.  
WHMIS Class D-2B: Material causing other toxic effects (TOXIC).  
CEPA DSL: Sodium Perchlorate

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This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.

**International Regulations****EINECS**

Sodium Perchlorate 231-511-9

**DSCL (EEC)**

R8- Contact with combustible material may cause fire.

R37/38- Irritating to respiratory system and skin.

R41- Risk of serious damage to eyes.

**International Lists**

Australia (NICNAS): Sodium Perchlorate

Japan (MITI): Sodium Perchlorate

Korea (TCCL): Sodium Perchlorate

Philippines (RA6969): Sodium Perchlorate

China: No products were found.

**State Regulations**

Pennsylvania RTK: Sodium Perchlorate: (generic environmental hazard)

Massachusetts RTK: Sodium Perchlorate

New Jersey: Sodium Perchlorate

California prop. 65: No products were found.

**Section 16. Other Information**

**National Fire  
Protection  
Association  
(U.S.A.)**



**Changed Since Last  
Revision**

**Notice to Reader**

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