

## MATERIAL SAFETY DATA SHEET

**Perchloracap®**  
Potassium Perchlorate Capsules

### SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Perchloracap®  
**Synonyms:** Potassium perchlorate in gelatin capsules.  
**Manufacturer:** Mallinckrodt Inc.  
2703 Wagner Place  
Maryland Heights, MO 63043

**Revision Date:** January 1, 2000  
**Information Telephone Number:** (888) 744-1414  
**Emergency Telephone Number:** (314) 654-7860  
**CHEMTREC:** 1-800-424-9300  
**CANUTEC:** 613-996-6666

### SECTION 2. COMPOSITION, INFORMATION ON INGREDIENTS

#### Chemical Ingredients:

Component	CAS #	Wt %
Potassium Perchlorate	7778-74-7	20%
Calcium Phosphate Dibasic	7757-93-9	40%
Calcium Sulfate	7778-18-9	37%
Stearic Acid	57-11-4	3%

### SECTION 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Potassium Perchlorate is an Oxidizing Material. Read Package Insert prior to use. Avoid contact with eyes, skin and clothing. Store in a tightly closed container. Avoid breathing dust. In case of contact, immediately flush skin with plenty of water for at least 15 minutes. If more than a prescribed dose is swallowed, get immediate medical attention.

#### POTENTIAL HEALTH EFFECTS

Perchloracap Potassium Perchlorate Capsules are not expected to produce any adverse health effects when administered under the conditions described in the package insert. The health effects from potassium perchlorate are described below.

#### **Inhalation:**

Irritant, especially as fine dust. Can cause coughing, sneezing, breathing difficulty.

#### **Ingestion:**

Irritant to mucous membrane; causes gastrointestinal upset. Toxicity reportedly due to strong oxidant effect and possible destruction of red blood cells.

#### **Skin Contact:**

Irritant. May cause burns or soreness, especially on moist skin.

#### **Eye Contact:**

Irritant. May cause reddening, tearing.

#### **Chronic Exposure:**

Chronic exposure may affect red blood cells.

#### **Aggravation of Pre-existing Conditions:**

Persons with pre-existing skin disorders or impaired respiratory function may be more susceptible to the effects of the substance.

## SECTION 4. FIRST AID MEASURES

**Inhalation:**

Not expected to require first aid measures.

**Ingestion:**

If more than a prescribed dose is swallowed, get immediate medical attention.

**Skin Exposure:**

Wash thoroughly with running water. Get medical advice if irritation develops.

**Eye Exposure:**

Wash eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical advice immediately.

## SECTION 5. FIRE FIGHTING MEASURES

**Fire:** Not combustible, but potassium perchlorate is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. May liberate toxic gases when involved in a fire.

**Explosion:** Not considered to be an explosion hazard, however potassium perchlorate may explode when involved in a fire.

**Fire Extinguishing Media:** Flood with large amounts of water.

**Special Instructions:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Collect loose capsules in a suitable disposal container. If loose powder is released, scoop up spill and collect for disposal. Avoid dust dispersal. If necessary, powder can be moistened and acidified to promote the reduction reaction. The resulting slurry can then be neutralized with soda ash. All cleanup operations should be performed according to the Standard Operating Procedures (SOPs) established for your facility as well as any applicable regulations.

## SECTION 7. HANDLING AND STORAGE

Keep in a tightly closed container. Store in a cool (below 27°C), dry, ventilated area away from sources of heat or ignition. Isolate from flammable materials.

## SECTION 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

**Airborne Exposure Limits:**

**For Calcium Sulfate:**

–OSHA Permissible Exposure Limit (PEL):  
15 mg/m<sup>3</sup> total dust, 5 mg/m<sup>3</sup> respirable fraction.  
–ACGIH Threshold Limit Value (TLV):  
10 mg/m<sup>3</sup> total dust containing no asbestos and  
< 1% free silica.

**Engineering Controls:**

Not expected to require any special ventilation.

**Respiratory Protection:**

Not expected to require any personal respirator usage.

**Skin Protection:**

Disposable plastic, latex, or rubber gloves;  
labcoat.

**Eye/Face Protection:**

Safety glasses.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Opaque, gray gelatin capsule imprinted with NDC 19-N025.

**Boiling Point:** Not applicable.

**Odor:** Odorless.

**Melting Point:** Decomposes ca. 400°C (752°F).

**Solubility:** Somewhat soluble in water.

## SECTION 10. STABILITY AND REACTIVITY

**Stability:** Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:** Chlorine and oxides of potassium, oxides of sulfur, and oxides of carbon.

**Hazardous Polymerization:** This substance does not polymerize.

**Incompatibilities:**

**For potassium perchlorate:** Aluminum, magnesium, charcoal, fluorine, sulfur, many combustible substances and reducing agents.

## SECTION 11. TOXICOLOGICAL INFORMATION

For detailed toxicological information on specific components, write to the address listed in Section 1 - Attn: Regulatory Compliance Department.

## SECTION 12. ECOLOGICAL INFORMATION

Because this product is intended for use by hospital or clinic patients, it is expected to be treated by standard wastewater treatment facilities with no adverse environmental impacts.

## SECTION 13. DISPOSAL CONSIDERATIONS

Potassium perchlorate, 20% of each capsule, is an oxidizer and therefore a hazardous waste. Depending on the amount of capsules or the quantity of powder that must be disposed, the waste may be classified as hazardous under RCRA. Consult your local, state or federal regulations for specific guidance.

## SECTION 14. TRANSPORT INFORMATION

**DOT (Department of Transportation):** Not Regulated

## SECTION 15. REGULATORY INFORMATION

**CERCLA Reportable Quantities:** None

**SARA Title III**

302 Extremely Hazardous Substances: None

311/312 Hazard Categories: Acute, Chronic, Fire.

313 Toxic substances subject to annual release reporting requirements: None.

**RCRA Hazardous Waste Status**

Non-hazardous (See Section 13 for additional details.)

**California Proposition 65 Warning**

Not Applicable.

**Australian Hazchem Code:** None allocated.

**Australian Poison Schedule:** None allocated.

**WHMIS:** This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## SECTION 16. OTHER INFORMATION

**MSDS Status:** Revised in accordance with ANSI Guideline Z400.1-1998

**NFPA Ratings:** Health: 1 Flammability: 1 Reactivity: 0

**Product Use:** Diagnostic imaging agent

**Revision Information:** The following sections have been revised: 1, 16.

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