

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 01/30/2015 Date of issue: 01/30/2015

# **SECTION 1: IDENTIFICATION**

**Product Identifier Product Form:** Mixture

**Product Name:** Mercury Indicator Powder

Product Code: 5230 series

Synonyms: Mercsorb® Mercury Indicator Powder

**Intended Use of the Product** 

Used to convert elemental mercury into an amalgam, which stops dangerous mercury vapors from being emitted. For professional

use only.

# Name, Address, and Telephone of the Responsible Party

Company

**NPS Corporation** 3303 Spirit Way Green Bay, WI 54304 800-558-5066

npscorp.com

**Emergency Telephone Number** 

Emergency Number : (800) 424-9300 (USA); +1 (703) 527-3887 (International and Maritime) CHEMTREC

# **SECTION 2: HAZARDS IDENTIFICATION**

### **Classification of the Substance or Mixture**

# Classification (GHS-US)

Acute Tox. 4 (Oral) H302 Skin Irrit. 2 H315 Eve Dam. 1 H318 Skin Sens. 1 H317 STOT RE 1 H372 Aquatic Acute 1 H400 Aquatic Chronic 2 H411

Full text of H-phrases: see section 16

**Label Elements GHS-US Labeling** 

**Hazard Pictograms (GHS-US)** 







Version: 1.0

Signal Word (GHS-US) : Danger

**Hazard Statements (GHS-US)** : H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H372 - Causes damage to organs (thyroid gland) through prolonged or repeated exposure

(oral).

H400 - Very toxic to aquatic life.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary Statements (GHS-US) : P260 - Do not breathe dust.

P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P273 - Avoid release to the environment.

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P280 - Wear eye protection, protective clothing, protective gloves.

P301+P312 - IF SWALLOWED: Call a doctor, a POISON CENTER if you feel unwell.

P302+P352 - IF ON SKIN: Wash with plenty of water.

 ${\it P305+P351+P338-IF\ IN\ EYES:\ Rinse\ cautiously\ with\ water\ for\ several\ minutes.\ Remove}$ 

contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a doctor or POISON CENTER.

P321 - Specific treatment (see Section 4).

P330 - Rinse mouth.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P362 - Take off contaminated clothing and wash before reuse.

P391 - Collect spillage.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

#### **Other Hazards**

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

#### Unknown Acute Toxicity (GHS-US) Not available

| Name                                    | Product Identifier   | % (w/w) | Classification (GHS-US)   |
|---|----------------------|---------|---------------------------|
| Sulfur                                  | (CAS No) 7704-34-9   | 40 - 70 | Comb. Dust, H232          |
|   |                      |         | Skin Irrit. 2, H315       |
|   |                      |         | Aquatic Acute 3, H402     |
| Copper iodide (CuI)                     | (CAS No) 7681-65-4   | 10 - 30 | Acute Tox. 4 (Oral), H302 |
|   |                      |         | Skin Irrit. 2, H315       |
|   |                      |         | Eye Dam. 1, H318          |
|   |                      |         | Skin Sens. 1A, H317       |
|   |                      |         | STOT RE 1, H372           |
|   |                      |         | Aquatic Acute 1, H400     |
|   |                      |         | Aquatic Chronic 2, H411   |
| Silica, amorphous, precipitated and gel | (CAS No) 112926-00-8 | 7 - 13  | Not classified            |

Full text of H-phrases: see section 16

# **SECTION 4: FIRST AID MEASURES**

#### **Description of First Aid Measures**

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Rinse immediately with plenty of water. Remove contaminated clothing. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

# Most Important Symptoms and Effects Both Acute and Delayed

General: Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction.

**Inhalation:** May cause respiratory irritation.

**Skin Contact:** May cause skin irritation. **Eye Contact:** May cause eye irritation.

**Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** Causes damage to organs through prolonged or repeated exposure. **Indication of Any Immediate Medical Attention and Special Treatment Needed** 

If you feel unwell, seek medical advice (show the label where possible).

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#### **SECTION 5: FIRE-FIGHTING MEASURES**

#### **Extinguishing Media**

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

# **Special Hazards Arising From the Substance or Mixture**

Fire Hazard: Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

#### **Advice for Firefighters**

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Sulfur oxides. Fume.

# **Reference to Other Sections**

Refer to section 9 for flammability properties.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing dust.

#### **For Non-Emergency Personnel**

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

#### **For Emergency Personnel**

**Protective Equipment:** Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

#### **Environmental Precautions**

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

# Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

# **Reference to Other Sections**

See Heading 8. Exposure controls and personal protection.

# **SECTION 7: HANDLING AND STORAGE**

# **Precautions for Safe Handling**

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### **Conditions for Safe Storage, Including Any Incompatibilities**

Technical Measures: Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

#### Specific End Use(s)

Used to convert elemental mercury into an amalgam, which stops dangerous mercury vapors from being emitted. For professional use only.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government

| Sulfur (7704-34-9) |                 |          |
|--------------------|-----------------|----------|
| Alberta            | OEL TWA (mg/m³) | 10 mg/m³ |

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| Silica, amorphous, pred | cipitated and gel (112926-00-8) |   |
|-------------------------|---------------------------------|---|
| Mexico                  | OEL TWA (mg/m³)                 | 10 mg/m³  |
| British Columbia        | OEL TWA (mg/m³)                 | 4 mg/m³ (total)                                     |
| New Brunswick           | OEL TWA (mg/m³)                 | 10 mg/m³  |
| Ontario                 | OEL TWA (mg/m³)                 | 10 mg/m³  |
| Québec                  | VEMP (mg/m³)                    | 6 mg/m³ (containing no Asbestos and <1% Crystalline |
|                         |                                 | silica-respirable dust)                             |
| Saskatchewan            | OEL STEL (mg/m³)                | 20 mg/m <sup>3</sup>                                |
| Saskatchewan            | OEL TWA (mg/m³)                 | 10 mg/m³  |

#### **Exposure Controls**

**Appropriate Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing.







Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed

established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

# Information on Basic Physical and Chemical PropertiesPhysical State: SolidAppearance: Tan powderOdor: ChalkyOdor Threshold: Not available

**pH** : 6.5

**Evaporation Rate** : Not available

Melting Point : Decomposes > 120 °C (248 °F)

**Freezing Point** Not available **Boiling Point** Not available **Flash Point** Not available Not available **Auto-ignition Temperature Decomposition Temperature** Not available Flammability (solid, gas) Not available **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available **Vapor Pressure** Not available Relative Vapor Density at 20 °C Not available **Relative Density** Not available Specific gravity / density 0.77 g/ml **Specific Gravity** Not available Solubility Not available **Partition Coefficient: N-Octanol/Water** Not available

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Viscosity : Not available

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact. Explosion Data – Sensitivity to Static Discharge : Not expected to present an explosion hazard due to static discharge.

# SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

Hazardous Decomposition Products: CarbSulfur oxides.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

# **Information on Toxicological Effects - Product**

Acute Toxicity: Oral: Harmful if swallowed.

LD50 and LC50 Data:

| Mercury Indicator Powder |                            |
|--------------------------|----------------------------|
| ATE US (oral)            | 2,000.00 mg/kg body weight |

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye damage.

**Respiratory or Skin Sensitization:** May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

**Teratogenicity:** Not available **Carcinogenicity:** Not classified

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs (thyroid gland) through prolonged or repeated

exposure (oral).

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation. Symptoms/Injuries After Skin Contact: May cause skin irritation. Symptoms/Injuries After Eye Contact: May cause eye irritation.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects. **Chronic Symptoms:** Causes damage to organs through prolonged or repeated exposure.

# <u>Information on Toxicological Effects - Ingredient(s)</u>

#### LD50 and LC50 Data:

| 2200 and 2000 2000. |                |
|---------------------|----------------|
| Sulfur (7704-34-9)  |                |
| LD50 Oral Rat       | > 3000 mg/kg   |
| LD50 Dermal Rabbit  | > 2000 mg/kg   |
| LC50 Inhalation Rat | > 9.23 mg/l/4h |

| Silica, amorphous, precipitated and gel (112926-00-8) |   |
|---|---|
| IARC Group  | 3 |

# **SECTION 12: ECOLOGICAL INFORMATION**

#### **Toxicity**

**Ecology - General:** Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

| Sulfur (7704-34-9) |   |
|--------------------|---|
| LC50 Fish 1        | 866 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])  |
| EC50 Daphnia 1     | 736 mg/l  |
| LC 50 Fish 2       | 14 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static]) |

#### Persistence and Degradability Not available

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#### Bioaccumulative Potential Not available

Mobility in Soil Not available

**Other Adverse Effects** 

Other Information: Avoid release to the environment.

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

**Ecology – Waste Materials:** Avoid release to the environment.

#### **SECTION 14: TRANSPORT INFORMATION**

In Accordance with DOTNot regulated for transportIn Accordance with IMDGNot regulated for transportIn Accordance with IATANot regulated for transportIn Accordance with TDGNot regulated for transport

# **SECTION 15: REGULATORY INFORMATION**

#### **US Federal Regulations**

| Mercury Indicator Powder            |                                 |
|-------------------------------------|---------------------------------|
| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard |
|                                     | Immediate (acute) health hazard |
| Sulfur (7704-34-9)                  |                                 |

Listed on the United States TSCA (Toxic Substances Control Act) inventory

# Copper iodide (CuI) (7681-65-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

# **US State Regulations**

# Copper iodide (CuI) (7681-65-4)

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

#### Sulfur (7704-34-9)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

# Silica, amorphous, precipitated and gel (112926-00-8)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

#### **Canadian Regulations**

| Mercury Indicator Powde | ır   |
|-------------------------|--|
| WHMIS Classification    | Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects |
|                         |  |





# Sulfur (7704-34-9)

| Listed on the Canadian DSL | (Domestic Substances List) |
|----------------------------|----------------------------|
|----------------------------|----------------------------|

| WHMIS Classification | Class B Division 4 - Flammable Solid  |
|----------------------|---|
|                      | Class D Division 2 Subdivision B - Toxic material causing other toxic effects |

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Listed on the Canadian DSL (Domestic Substances List)

# Silica, amorphous, precipitated and gel (112926-00-8)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

# SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 01/30/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

#### **GHS Full Text Phrases:**

| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4                                 |
|---------------------|--|
| Aquatic Acute 1     | Hazardous to the aquatic environment - Acute Hazard Category 1   |
| Aquatic Acute 3     | Hazardous to the aquatic environment - Acute Hazard Category 3   |
| Aquatic Chronic 2   | Hazardous to the aquatic environment - Chronic Hazard Category 2 |
| Comb. Dust          | Combustible Dust   |
| Eye Dam. 1          | Serious eye damage/eye irritation Category 1                     |
| Skin Irrit. 2       | Skin corrosion/irritation Category 2                             |
| Skin Sens. 1        | Skin sensitization Category 1                                    |
| Skin Sens. 1A       | Skin sensitization Category 1A                                   |
| STOT RE 1           | Specific target organ toxicity (repeated exposure) Category 1    |
| H232                | May form combustible dust concentrations in air                  |
| H302                | Harmful if swallowed   |
| H315                | Causes skin irritation   |
| H317                | May cause an allergic skin reaction                              |
| H318                | Causes serious eye damage  |
| H372                | Causes damage to organs through prolonged or repeated exposure   |
| H400                | Very toxic to aquatic life                                       |
| H402                | Harmful to aquatic life  |
| H411                | Toxic to aquatic life with long lasting effects                  |

#### Party Responsible for the Preparation of This Document

NPS Corporation 3303 Spirit Way Green Bay, WI 54304 800-558-5066

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS 2

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