

MERCSORB® Mercury Amalgamation Powder

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 02/25/2015 Date of issue: 02/25/2015

Version: 1.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: MERCSORB® Mercury Amalgamation Powder

Product Code: 5200 series

Synonyms: Amalgamation Powder, Zinc

Intended Use of the Product

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

Name, Address, and Telephone of the Responsible Party

Company

NPS Corporation
3303 Spirit Way
Green Bay, WI 54304
8005585055
npscorp.com

Emergency Telephone Number

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

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Comb. Dust

Aquatic Acute 1 H400

Aquatic Chronic 1 H410

Full text of H-phrases: see section 16

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)

:



GHS09

Signal Word (GHS-US)

: Warning

Hazard Statements (GHS-US)

: May form combustible dust concentrations in air.

H400 - Very toxic to aquatic life.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary Statements (GHS-US)

: P273 - Avoid release to the environment.

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. Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Zinc	(CAS No) 7440-66-6	90 - 95	Comb. Dust Aquatic Acute 1, H400

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			Aquatic Chronic 1, H410
Citric acid	(CAS No) 77-92-9	5 - 10	Comb. Dust Eye Irrit. 2A, H319

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: Not expected to present a significant dermal hazard under anticipated conditions of normal use.

Eye Contact: Rinse cautiously with water for at least 15 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: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath.

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: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

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

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 itself is not explosive but if dust is generated, dust clouds suspended in air can be 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: Zinc oxides. Carbon oxides (CO, CO₂).

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 generating or 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 liquid enters sewers or public waters.

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Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

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. Use only non-sparking tools.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Dust generated from processing may present a dust explosion hazard.

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 bases. Strong oxidizers.

Specific End Use(s)

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

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

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: Gloves.



Materials for Protective Clothing: Not required for normal conditions of use.

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 Properties

Physical State	: Solid
Appearance	: Fine blue, gray, or white powder
Odor	: Odorless
Odor Threshold	: Not available
pH	: 1.18 (1% solution)
Evaporation Rate	: Not available
Melting Point	: 787 °F (419.44 °C)
Freezing Point	: Not available

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Boiling Point	: 1666 °C (3030.8 °F)
Flash Point	: Not available
Auto-ignition Temperature	: Not available
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	: 7.11 (Water=1)
Solubility	: Water: Light soluble
Partition Coefficient: N-Octanol/Water	: Not available
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	: Static discharge could act as an ignition source.

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: Extremely high or low temperatures. Incompatible materials. Ignition sources.

Incompatible Materials: Strong bases. Strong oxidizers.

Hazardous Decomposition Products: Zinc oxides. Carbon oxides (CO, CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath.

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: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Citric acid (77-92-9)	
LD50 Oral Rat	5400 mg/kg
LD50 Dermal Rat	> 2000 mg/kg

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ATE US (oral)	5,400.00 mg/kg body weight
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SECTION 12: ECOLOGICAL INFORMATION

Toxicity

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

Zinc (7440-66-6)	
LC50 Fish 1	2.16 - 3.05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	0.139 - 0.908 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	0.211 - 0.269 mg/l (Exposure time: 96 h - Species: Pimephales promelas [semi-static])
Citric acid (77-92-9)	
LC50 Fish 1	1516 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

Persistence and Degradability

Citric acid (77-92-9)	
Persistence and Degradability	Readily biodegradable in water.

Bioaccumulative Potential

Citric acid (77-92-9)	
Log Pow	-1.72 (at 20 °C)

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

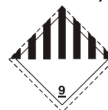
Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.(Zinc powder)
Hazard Class : 9
Identification Number : UN3077
Label Codes : 9
Packing Group : III
Marine Pollutant : Marine pollutant
ERG Number : 171



In Accordance with IMDG

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.(Zinc powder)
Hazard Class : 9
Identification Number : UN3077
Packing Group : III
Label Codes : 9
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Marine pollutant : Marine pollutant



In Accordance with IATA

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.(Zinc powder)
Packing Group : III
Identification Number : UN3077
Hazard Class : 9
Label Codes : 9
ERG Code (IATA) : 9L



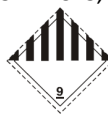
In Accordance with TDG

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Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.(Zinc powder)
Hazard Class : 9
Identification Number : UN3077
Label Codes : 9
Packing Group : III



SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Zinc (7440-66-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 % (dust or fume only)
Citric acid (77-92-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

US State Regulations

Zinc (7440-66-6)	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S. - Pennsylvania - RTK (Right to Know) List	

Canadian Regulations

MERCSORB® Mercury Amalgamation Powder	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
Zinc (7440-66-6)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
Citric acid (77-92-9)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

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 : 02/25/2015
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:

Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Comb. Dust	Combustible Dust
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

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Party Responsible for the Preparation of This Document

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Green Bay, WI 54304

8005585066

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