

# Michigan State Industries

# SAFETY DATA SHEET

MSI-8791 – Power Capsule

Date: 5/9/2019

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier** Power Capsule

### Other Means of Identification

**Product Code** 8791

### Recommended Use of the Chemical and Restrictions on Use

**Recommended Use** Machine Dishwashing for use with injector fed systems

### Details of the Supplier of the Safety Data Sheet

**Manufactured for Address** Michigan State Industries  
1780 E. Parnall Rd.  
Jackson, MI. 49201

### Emergency Telephone Number

**Company Phone Number** 517-780-6726  
**Emergency Telephone** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

### Classification

Skin Corrosion/Irritation	Category 1 Sub-category B
Serious Eye Damage/Eye Irritation	Category 1

**Signal Word** DANGER

**Hazard Statements** Causes severe skin burns and eye damage.  
May cause respiratory irritation  
Harmful if swallowed



**Appearance:** White powder

**Physical State:** Solid

**Odor:** Chlorine Odor

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray. Do not ingest.  
Wash face, hands, and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary Statements – Response**

Immediately call a POISON Center or doctor/physician

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.

**IF ON SKIN:** Remove contaminated clothing immediately. Flush with water for at least 15 minutes. Seek medical attention if irritation occurs. Wash contaminated clothing before reuse

**IF INHALED:** Remove person to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical attention if irritation occurs.

**IF SWALLOWED:** Rinse mouth. Immediately call local poison control center or physician for treatment advice.

**Precautionary Statements - Storage**

Store locked up, in an area inaccessible to children. Store in a cool, dry area.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Sodium Carbonate	497-19-8	45 - 55
Sodium Hydroxide	1310-73-2	10 - 25
Sodium Metasilicate	6834-92-0	10 – 20
Sodium dichloroisocyanurate dihydrate	51580-86-0	0 - 5

### 4. FIRST AID MEASURES

**First Aid Measures**

<b>Inhalation</b>	Remove person to fresh air. If breathing is difficult, have a trained person administer oxygen. If respiration stops, administer mouth-to-mouth resuscitation, get medical attention immediately.
<b>Eye Contact</b>	Immediately flush with large amounts of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing eyes within several seconds is essential to achieve maximum effectiveness. Get medical attention.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. DO NOT induce vomiting. Give large quantities of water, if available give several glasses of milk. If vomiting occurs spontaneously, keep airway clear. Seek medical attention immediately.
<b>Skin Contact</b>	Immediately flush with plenty of water for at least 15 minutes. Remove contaminated clothing and footwear and wash clothing before reuse. Discard footwear, which cannot be decontaminated. Get medical attention immediately.

**Most Important Symptoms and Effects, both Acute and Delayed**

<b>Symptoms</b>	The effect of local dermal exposure may consist of multiple areas of superficial destruction of the skin or of primary irritant dermatitis. Similarly, inhalation of dust, spray or mist may result in varying degrees of irritation or damage to the respiratory tract tissues and an increased susceptibility to respiratory illness.
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**Indication of any Immediate Medical Attention and Special Treatment Needed**

**Note to Physicians**                      Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Flood with water.

**Unsuitable Extinguishing Media** ABC fire extinguishers, carbon dioxide, dry chemicals.

**Hazardous Combustion Products:**

Chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, phosgene.

**Protective Equipment and Precautions for Firefighters**

When any material is involved in a fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal Precautions, Protective Equipment and Emergency Procedures**

**Personal Precautions**                      Wear appropriate protective clothing.

**Methods and Material for Containment and Cleaning Up**

**Methods for Containment**                      Prevent further leakage or spillage, if safe to do so. Do not add water to spilled material.

**Methods for Cleaning Up**                      SMALL SPILLS: do not add water to spilled material. Isolate spill; sweep up and collect for disposal. Damp material should be neutralized to a non-oxidizing state. LARGE SPILLS: Isolate spill; keep material dry and collect for disposal.

**7. HANDLING AND STORAGE****Precautions for Safe Handling**

**Advice on Safe Handling**                      Do not breathe dust/fume/gas/mist/vapors/spray. Wear appropriate personal protective equipment. Wash face, hands, and any exposed skin thoroughly after handling. Never add water to this product. Always add product to large quantities of water. Do not add this product to any dispensing device containing residuals of other products.

**Conditions for Safe Storage, Including any Incompatibilities**

**Storage Conditions**                      KEEP OUT OF REACH OF CHILDREN. Keep containers tightly closed in a cool, well-ventilated place. Store locked up.

**Incompatible Materials**                      Acids, ammonia, bases. Contact with some metals; particularly magnesium, aluminum and zinc (galvanized) can rapidly generate hydrogen which is explosive.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium Hydroxide	2 mg/m <sup>3</sup>	2mg/m <sup>3</sup>	2mg/m <sup>3</sup>

**Appropriate Engineering Controls**

**Engineering Controls** Good general ventilation should be sufficient for most conditions.

**Individual Protection Measures, such as Personal Protective Equipment**

**Eye/Face Protection** Safety glasses Wear face shield if splashing can occur.

**Skin and Body Protection** Wear protective gloves and protective clothing. Rubber or PVC.

**Respiratory Protection** Ensure adequate ventilation, especially in confined areas.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on Basic Physical and Chemical Properties**

<b>Physical State</b>	Solid	<b>Odor</b>	Chlorine odor
<b>Appearance</b>	White Powder	<b>Odor Threshold</b>	N/A
<b>Color</b>	White		
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
<b>pH in 1% solution</b>	13		
<b>Melting Point/Freezing Point</b>	Not determined		
<b>Boiling Point/Boiling Range</b>	Not determined		
<b>Flash Point</b>	Not determined		
<b>Evaporation Rate</b>	Not available		
<b>Flammability (Solid, Gas)</b>	Not determined		
<b>Upper Flammability Limits</b>	Not determined		
<b>Lower Flammability Limit</b>	Not determined		
<b>Vapor Pressure</b>	Not determined		
<b>Vapor Density</b>	Not determined		
<b>Specific Gravity</b>	Not applicable		
<b>Water Solubility</b>	Completely soluble		

**10. STABILITY AND REACTIVITY****Reactivity**

Not reactive under normal conditions.

Will react with incompatible materials. Contact with some metals; particularly magnesium, aluminum and zinc (galvanized) can rapidly generate hydrogen which is explosive.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to Avoid**

Incompatible materials.

**Incompatible Materials**

Acids. Sodium hydroxide is corrosive to tin, aluminum, zinc and alloys containing these metals.

**Hazardous Decomposition Products**

Chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, phosgene.

## 11. TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

<b>Inhalation</b>	May cause irritation to the mucous membranes and upper respiratory tract.
<b>Eye Contact</b>	Causes severe eye damage.
<b>Skin Contact</b>	Causes severe skin burns. May be harmful in contact with skin.
<b>Ingestion</b>	May be harmful if swallowed.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Carbonate 497-19-8	2800 mg/kg (Rat)	>2000 mg/k (Rabbit)	2.30 mg/l (Rat)
Sodium Metasilicate 6834-92-0	1152 – 1349 mg/kg (Rat)	>5000 mg/kg (Rat)-	>2.06 g/m <sup>3</sup> (Rat)

### Information on Physical, Chemical and Toxicological Effects

<b>Symptoms</b>	The effect of local dermal exposure may consist of multiple areas of superficial destruction of the skin or of primary irritant dermatitis. Similarly, inhalation of dust, spray or mist may result in varying degrees of irritation or damage to the respiratory tract tissues and an increased susceptibility to respiratory illness.
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### Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

<b>Carcinogenicity</b>	No components of this product have been classified as a carcinogen by NTP, IARC or OSHA.
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## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium Hydroxide 1310-73-2		96 h 0.22 mg/L LC50 (rainbow trout) 96 h 0.28 mg/L LC50 (bluegill sunfish)		

### Persistence and Degradability

This product is biodegradable.

### Bioaccumulation

Not determined.

### Mobility

Not determined.

### Other Adverse Effects

Not determined.

### 13. DISPOSAL CONSIDERATIONS

#### Waste Treatment Methods

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

### 14. TRANSPORT INFORMATION

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

#### DOT

<b>UN/ID No</b>	UN1823
<b>Proper Shipping Name</b>	Corrosive solids, n.o.s., (Sodium hydroxide, mixture)
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>Additional Information</b>	Limited Quantity, DOT Label/Placard Exemption §173.154 applies

#### IATA

<b>UN/ID No</b>	UN1823
<b>Proper Shipping Name</b>	Corrosive solids, n.o.s. (Sodium hydroxide, mixture)
<b>Hazard Class</b>	8
<b>Packing Group</b>	III

#### IMDG

<b>UN/ID No</b>	UN1823
<b>Proper Shipping Name</b>	Corrosive solids, n.o.s. (Sodium hydroxide, mixture)
<b>Hazard Class</b>	8
<b>Packing Group</b>	III

### 15. REGULATORY INFORMATION

#### International Inventories

<b>TSCA</b>	Listed
<b>DSL</b>	Listed

#### **Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

#### US Federal Regulations

**CERCLA Reportable Quantity** The following components are listed:

Chemical Name	CAS Number	CERCLA RQ
Sodium Hydroxide	1310-73-2	1000 lbs.

#### SARA 313

No chemical (s) components of this product are subject to reporting levels established by SARA Title III, Section 313.

#### US State Regulations

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium hydroxide	X	X	X

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Reactivity</b>	<b>Special Hazards</b>
	2	0	1	Not determined
<b>HMIS</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Reactivity</b>	<b>Personal Protection</b>
	2	0	1	B

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**