

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
17600 Ryan Rd.
Detroit, MI. 48212

Emergency Telephone Number

Company Phone Number 313-368-3200
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

| | |
|---------------------|--|
| Inhalation | 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. |
| Eye Contact | 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. |
| Ingestion | 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. |
| Skin Contact | 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

| | |
|-----------------|---|
| Symptoms | 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. |
|-----------------|---|

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 ³ | 2mg/m ³ | 2mg/m ³ |

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**

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

| | |
|---------------------|---|
| Inhalation | May cause irritation to the mucous membranes and upper respiratory tract. |
| Eye Contact | Causes severe eye damage. |
| Skin Contact | Causes severe skin burns. May be harmful in contact with skin. |
| Ingestion | 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 ³ (Rat) |

Information on Physical, Chemical and Toxicological Effects

| | |
|-----------------|---|
| Symptoms | 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. |
|-----------------|---|

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

| | |
|------------------------|--|
| Carcinogenicity | No components of this product have been classified as a carcinogen by NTP, IARC or OSHA. |
|------------------------|--|

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

| | |
|-------------------------------|---|
| Disposal of Wastes | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| Contaminated Packaging | 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

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

IATA

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

IMDG

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

15. REGULATORY INFORMATION

International Inventories

| | |
|-------------|--------|
| TSCA | Listed |
| DSL | 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

| | | | | |
|-------------|-----------------------|---------------------|-------------------|----------------------------|
| NFPA | Health Hazards | Flammability | Reactivity | Special Hazards |
| | 2 | 0 | 1 | Not determined |
| HMIS | Health Hazards | Flammability | Reactivity | Personal Protection |
| | 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