

**Section 1: Product & Company Information**

**Product Identifier:** Sodium Metasilicate, Pentahydrate

**Other Means of Identification**

Product Number: No data available.

**Recommended Use and Restrictions on Use**

Recommended Use: Laboratory chemicals, Manufacture of substances.  
Restrictions on Use: No data available.

**Manufacturer / Importer / Supplier / Distributor Information**

**Company Name:** CORECHEM Inc.

**Address:** 4320 Greenway Drive  
Knoxville, TN 37918  
USA

**Information Telephone Number:** 1-865-524-4239

**Fax Number:** 1-865-524-3375

**Website:** www.corecheminc.com

**Contact Person:** Regulatory Manager

**E-mail:** regulatory@corecheminc.com

**Emergency Phone Number:** Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)

**Section 2: Hazards Identification**

**GHS Hazard Classification(s)**

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

**Physical Hazard(s)**

Corrosive to Metals - 1

**Health Hazard(s)**

Corrosion/Irritation, Skin - 1B  
(Corrosion)Damage/Irritation, Eye - 1  
Specific Target Organ Toxicity (STOT)-Respiratory Irritation, Single exposure - 3

**Environmental Hazard(s)**

Not classified.

**Label Elements**

**Signal Word**

**DANGER**

**Hazard Symbol(s)**



**Hazard Statement(s)**

H290: May be corrosive to metals.  
H314: Causes severe skin burns and eye damage.  
H318: Causes serious eye damage.  
H335: May cause respiratory Irritation.

**Precautionary Statements**

**General**

Not applicable.

**Prevention**

P234: Keep only in original container.  
P260: Do not breathe dust/fume/gas/mist/vapors/spray.  
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264: Wash face, hands and any exposed skin thoroughly after handling.  
P271: Use only outdoors or in a well-ventilated area.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

P301 + P330 + P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
 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 POISON CENTER or doctor/physician.  
 P312: Call a POISON CENTER or doctor/physician if you feel unwell.  
 P321: Specific treatment (see supplemental first aid instructions on this label).  
 P363: Wash contaminated clothing before reuse.  
 P390: Absorb spillage to prevent material damage.

#### Storage

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.  
 P405: Store locked up.  
 P406: Store in corrosive resistant container with a resistant inner liner.

#### Disposal

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

#### Hazard(s) not otherwise classified (HNOC)

None known.

### Section 3: Composition/Information on Ingredients

#### Substance

Chemical Identity <sup>2</sup>	Common Name/Synonym(s)	CAS # <sup>3</sup>	Weight %	Impurity or Stabilizing Additive
Disodium Metasilicate Pentahydrate	Metso	10213-79-3	-	No

- Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.
- Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.
- “—”Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

### Section 4: First-Aid Measures

#### General Information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.

#### Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### Skin Contact

Take off immediately all contaminated clothing. Wash off IMMEDIATELY with plenty of water for at least 15-20 minutes. Get medical attention immediately! Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes.

#### Eye Contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

#### Ingestion

Call a physician or poison control center immediately. Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

#### Most important symptoms/effects, acute and delayed

##### Symptoms

No data available.

#### Indication of immediate medical attention and special treatment needed

##### Hazards

No data available.

##### Treatment

No data available.

### Section 5: Fire-Fighting Measures

#### General Fire Hazards

No data available.

#### Suitable (and Unsuitable) Extinguishing Media

##### Suitable Extinguishing Media

Extinguishing powder, alcohol resistant foam, carbon dioxide, water fog

##### Unsuitable Extinguishing Media

No data available.

#### Specific Hazards Arising from the Chemical

Sodium oxides, silicon oxides

**Special Protective Equipment and Precautions for Firefighters**

**Special Fire-Fighting Equipment Procedures**

No data available.

**Special Protective Equipment for Fire-Fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

## Section 6: Accidental Release Measures

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

Evacuate spill area. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Stay upwind and keep out of low area. Remove all possible sources of ignition in the surrounding area. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment. Ventilate contaminated area thoroughly shut off leaks if possible without personal risk.

**Methods and Materials for Containment and Clean-Up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.

**Notification Procedures**

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Environmental Precautions**

Avoid discharge into drains, water courses or onto the ground.

## Section 7: Handling and Storage

**Precautions for Safe Handling**

Use caution when handling/transferring. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe mist or vapor. Use only with adequate ventilation. Wear appropriate personal protective equipment. Transfer and storage systems should be compatible. Observe good industrial hygiene practices.

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

Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials (See Section 10). Ensure that all local regulations regarding handling and storage facilities are followed.

## Section 8: Exposure Controls/Personal Protection

**Control Parameters**

**Occupational Exposure Limits**

The product does not contain any relevant quantities of hazardous materials with critical values that have to be monitored in the workplace.

**Biological Limit Values**

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

**Appropriate Engineering Controls**

No data available.

**Individual protection measures, such as personal protective equipment (PPE)**

**General Information**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

**Eye/Face Protection**

Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.

**Skin Protection**

**Hand Protection**

Wear appropriate chemical resistant gloves.

**Other**

Wear appropriate chemical resistant clothing.

**Respiratory Protection**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information

**Hygiene Measures**

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated footwear that cannot be cleaned. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes, skin, and clothing.

## Section 9: Physical and Chemical Properties

<b>Appearance:</b>	
Physical State:	Solid
Color:	White
<b>Odor:</b>	No data available.
<b>Odor Threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting Point/Freezing Point:</b>	No data available.
<b>Initial Boiling Point and Boiling Range:</b>	No data available.
<b>Flash Point:</b>	Not applicable.
<b>Evaporation Rate (butyl acetate=1):</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Upper/Lower Limit on Flammability or Explosive Limits</b>	
Flammability Limit – Upper:	No data available.
Flammability Limit – Lower:	No data available.
Explosive Limit – Upper:	No data available.
Explosive Limit – Lower:	No data available.
<b>Vapor Pressure:</b>	No data available.
<b>Vapor Density (air =1):</b>	No data available.
<b>Relative Density (water=1):</b>	No data available.
<b>Solubility(ies):</b>	
Solubility in water:	No data available.
Solubility (other):	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-Ignition Temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.
<b>Other Information:</b>	
Molecular Weight:	212.14 g/mol
Formula:	Na <sub>2</sub> O <sub>3</sub> Si · 5H <sub>2</sub> O

## Section 10: Stability and Reactivity

### Reactivity

No data available.

### Chemical Stability

Material is stable under normal conditions.

### Possibility of Hazardous Reactions

No data available.

### Conditions to Avoid

No data available.

### Incompatible Materials

Strong oxidizing agents

### Hazardous Decomposition Products

No data available.

## Section 11: Toxicological Information

### Information on routes of exposure

**Ingestion:** No data available.

**Inhalation:** No data available.

**Skin Contact:** No data available.

**Eye Contact:** No data available.

### Information on Toxicological Effects

#### Acute Toxicity (List all possible routes of exposure)

##### Oral

Sodium Metasilicate Pentahydrate: LD50 (Rat): 847 mg/kg

##### Dermal

No data available.

##### Inhalation

No data available.

##### Repeated Dose Toxicity

No data available.

### Skin Corrosion/Irritation

No data available.

**Serious Eye Damage/Eye Irritation**

No data available.

**Respiratory/Skin Sensitization**

No data available.

**Carcinogenicity**

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**US. National Toxicology Program (NTP) Report on Carcinogens**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Germ Cell Mutagenicity**

**In Vitro**

No data available.

**In Vivo**

No data available.

**Reproductive Toxicity**

No data available.

**Specific Target Organ Toxicity – Single Exposure**

Inhalation - May cause respiratory irritation. - Respiratory system

**Specific Target Organ Toxicity – Repeated Exposure**

No data available.

**Aspiration Hazard**

No data available.

**Other Effects**

None known.

**Section 12: Ecological Information**

**Ecotoxicity**

**Acute Hazards to the Aquatic Environment**

**Fish**

No data available.

**Aquatic Invertebrates**

No data available.

**Toxicity to Aquatic Plants**

No data available.

**Chronic Hazards to the Aquatic Environment**

**Fish**

No data available.

**Aquatic Invertebrates**

No data available.

**Toxicity to Aquatic Plants**

No data available.

**Persistence and Degradability**

**Biodegradation**

There are no data on the degradability of this product.

**BOD/COD Ratio**

No data available.

**Bioaccumulative Potential**

**Bioconcentration Factor (BCF)**

No data available on bioaccumulation.

**Partition Coefficient n-octanol / water (log Kow)**

No data available.

**Mobility in Soil**

No data available.

**Other Adverse Effects**

No data available.

### Section 13: Disposal Considerations

#### Disposal Instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Contaminated Packaging

Handle contaminated packages in the same way as the substance itself. Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks, and flames. Do not cut, puncture, or weld on or near this container. Follow label warnings until container is thoroughly cleaned or destroyed.

### Section 14: Transportation Information

#### US Department of Transportation (DOT)

UN Number: UN3253  
UN Proper Shipping Name: Disodium trioxosilicate  
Technical Name: -  
Hazard Class: 8  
Subsidiary Hazard Risk: -  
Packing Group: III  
DOT Label/Placard Exemptions: Not determined  
Special Provisions: IB8, IP3, T1, TP33  
Packaging Exceptions: 49CFR 173.154  
Packaging Non-Bulk: 49CFR 173.213  
Packaging Bulk: 49CFR 173.240  
Reportable Quantity (RQ): None  
Marine Pollutant: No  
Poison Inhalation Hazard: No  
Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.  
Emergency Response Guidebook (ERG) #: 154

*Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.*

### Section 15: Regulatory Information

#### US Federal Regulations

##### Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)

This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

##### Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)

No chemical(s) in this material are subject to the reporting requirements of CERCLA.

##### Clean Air Act (CAA), Section 112(r)

No chemical(s) in this material are subject to the reporting requirements of CAA.

##### Emergency Planning and Community Right-To-Know Act (EPCRA)

###### EPCRA 302 Extremely Hazardous Substance

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

###### EPCRA 304 Emergency Response Notification

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

###### EPCRA 311/312 Emergency and Hazardous Materials Reporting

Fire Hazard: No  
Sudden Release of Pressure: No  
Reactive: No  
Acute (Immediate) Health Hazard: Yes  
Chronic (Delayed) Health Hazard: No

###### EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### US State Regulations

##### California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

*Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.*

**Section 16: Other Information**

**Hazardous Materials Identification System (HMIS®) Classification**

Health Hazard: 3

Chronic Health Hazard: /

Flammability: 0

Physical Hazard: 0

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

**National Fire Protection Association (NFPA 704) Rating**

Health Hazard: 3

Fire Hazard: 0

Reactivity Hazard: 0

Special: COR

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

Prepared By: Regulatory Manager

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**Key to Abbreviations and Acronyms**

ATE - Acute Toxicity Estimate

BCF - Bioconcentration Factor

EC50 - Effective concentration, 50%

IDHL - Immediately Dangerous to Life and Health

Kg - Kilogram

l - Liter

lb - Pound

LC50 - Lethal Concentration, 50%

LD50 - Lethal Dose, 50%

mg - milligram

ml - milliliter

N/A - Not Applicable

N/D - Not Determined

PEL - Permissible Exposure Limit

REL - Recommended Exposure Limit

STEL - Short-term Exposure Limit

TWA - Time weighted average

ACGIH - American Conference of Industrial Hygienists

AIHA - American Industrial Hygiene Association

BEI - Biological Exposure Indices

CAS - Chemical Abstracts Service

DOT - US Department of Transportation

EPA - US Environmental Protection Agency

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

IBC - Intermediate Bulk Container

IMDG - International Maritime Dangerous Goods

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - US Occupational Health and Safety Administration

SARA - US EPA Superfund Amendments and Reauthorization Act

TSCA - US EPA Toxic Substances Control Act

UN - United Nations

**References**

HSDB® - Hazardous Substances Data Bank

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