

SAFETY DATA SHEET



Colonial Chemical Solutions, Inc.

SECTION 1 - COMPANY AND PRODUCT IDENTIFICATION

PRODUCT

Product Name: SODIUM METASILICATE PENTAHYDRATE

Control Number: 00284

Product Description: Inorganic Salt

COMPANY IDENTIFICATION

Supplier: COLONIAL CHEMICAL SOLUTIONS, INC.

916 West Lathrop Avenue

Savannah, Georgia 31415

24 Hour Emergency Telephone: (800)-424-9300 CHEMTREC

General Information: (912) 236-1331

SECTION 2- HAZARDS IDENTIFICATION

GHS Classification:

[Health]

Skin corrosion Category 1B

Serious eye damage Category 1

Acute toxicity, Oral Category 4

Specific target organ toxicity - single exposure (Category 3), Respiratory system

[Environmental]

[Physical]

GHS Label elements, including precautionary statements

Pictograms



Signal Word: Danger

Hazard statement(s)

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Precautionary statement(s)

P260 Do not breathe dust or mist.

P264 Wash skin thoroughly after handling.

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

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

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 victim 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.

P363 Wash contaminated clothing before reuse.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/ container to an approved waste disposal plant.

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SECTION 3 · COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS Number	%WT
Disodium Metasilicate pentahydrate	10213-79-3	100

SECTION 4 · FIRST AID MEASURES

FIRST AID PROCEDURES:

Eyes: Flush with large amounts of cool running water for at least 15 minutes with eyelids forced open. If irritation persists obtain medical attention.

Skin: Brush loose particle from skin. Wash exposed skin with soap and water. If irritation develops and persists seek medical attention.

Inhalation: For excessive inhalation remove to fresh air. If recovery is not rapid seek medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth with water. Seek immediate medical attention.

SECTION 5 · FIRE FIGHTING MEASURES

Suitable Extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Hazardous combustion products: Oxides of Sodium and Silicon

Fire Fighting Procedures: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Unusual Fire and Explosion Hazards: Material is a crystalline powder and is not considered a fire or explosion hazard.

SECTION 6 · ACCIDENTAL RELEASE and DISPOSAL MEASURES

Spills: Evacuate all non-essential personnel from the spill area. Ensure adequate ventilation.

Suitable protective clothing should be worn. Shut off or plug source of spill. Wear respiratory protection. Avoid dust formation. Avoid breathing dust.

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7 · STORAGE AND HANDLING

Handling: Avoid contact with skin and eyes. Avoid formation of dust or aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

Storage: Keep container tightly closed in a dry and well-ventilated place. Store only in approved properly labeled containers. Product is hygroscopic.

SECTION 8 · EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Provide explosion-proof ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below.

Exposure Limits: Disodium Metasilicate 25 ppm ACGIH; 50 ppm OSHA

Personal Protective Equipment (PPE):

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Skin: If prolonged or repeated skin contact is likely, wear appropriate protective gloves.

Clothing: Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items.

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Respirators: Where adequate ventilation is not available an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard, 29 CFR 1920.134. In confined areas, use a self-contained breathing apparatus.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: Non-combustible	Flammability Limits: N/A
Autoignition Temperature: N/A	Specific Gravity: 1.75
Boiling Point: ^{N/A}	Volatile %: N/A
Melting Point/Freezing Point: 162 °F	Evaporation Rate (Water=1): N/A
Vapor Pressure: <0.01 mmHg	pH: >11.5
Vapor Density (Air-1):	Solubility in Water: 350 g/l
Odor/Appearance: White powder with no appreciable odor.	

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal use and temperature conditions.
Conditions to Avoid: No available or published data.
Incompatible Materials: Strong acids, Lead, Tin/tin oxides, Zinc, Aluminum.
Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Signs and Symptoms of Overexposure:

Skin: Repeated or prolonged contact can be irritating, causing dermatitis and sensitization.

Eyes: Dust in eyes can be irritating, causing tearing and redness.

Inhalation: High dust or vapor concentrations can be harmful. Can cause a sore throat and nose, coughing, sneezing and breathing difficulties.

Ingestion: Not a normal route of entry. However, can be harmful or fatal if swallowed.

Acute oral toxicity:

Disodium Metasilicate: LD50 rat: 874 mg/kg

Acute inhalation toxicity:

Disodium Metasilicate: LD50 rat: No available information

Acute dermal toxicity:

Disodium Metasilicate: LD50 rabbit: No available information

SECTION 12 - ECOLOGICAL INFORMATION

Aquatic Toxicity: Toxicity to fish semi-static test LC50 - Danio rerio (zebra fish) - 210 mg/l - 96 h

Bio-accumulative potential: Bioaccumulation data is not available.

Mobility: Material is a powder and not expected to penetrate the soil.

SECTION 13 - DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

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SECTION 14 - TRANSPORTATION

U.S. DEPARTMENT OF TRANSPORTATION (Road or Rail):

Proper Shipping Name: Disodium trioxosilicate
Hazard Class: 8
UN Number: 3253
Packaging Group: 3

SECTION 15 - REGULATORY INFORMATION

US FEDERAL REGULATIONS

Comprehensive Environmental Response and Liability Act (CERCLA)

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. The reportable quantity (RQ) for this material has not been established.

Toxic Substance Control Act (TSCA): All components of this product are listed on the TSCA inventory list.

SARA Section 311/312 (40 CFR 370) Hazard Categories:

Acute Health Hazard

SARA Section 313 (40 CFR 372) Hazard Categories: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Water Act: This product contains no chemicals that are listed under the CWA.

Clean Air Act: This product contains no chemicals that are listed under the CAA.

California Prop 65: This product contains no chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 - OTHER INFORMATION

SDS Revision Date: May 2015

National Fire Protection Association (NFPA) Ratings: This information is intended solely for the use of individuals trained in the NFPA system.

Health: 3
Flammability: 0
Reactivity: 0

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