# Sodium Metasilicate Anhydrous

## SECTION 1. IDENTIFICATION

**Product Identifier** Sodium Metasilicate Anhydrous

**Other Means of Identification** Sodium Metasilicate

**Recommended Use** Cleaner, Detergents/ Soaps.

**Supplier Identifier** Integrity Chemical Solutions Inc. 205 Crystal Shores Drive, Okotoks, Alberta T1S 2L1 403.988.7695

**Emergency Phone No.**

**FOR EMERGENGIES INVOLVING DANGEROUS GOODS**
Call CANUTEC'S 24-Hour Number:
1-888-CANUTEC (226-8832) (North American use) and/or 1-613-996-6666 (International use)

## SECTION 2. HAZARD IDENTIFICATION

**Classification**

Corrosive to metals - Category 1; Acute toxicity (Oral) - Category 3; Acute toxicity (Inhalation) - Category 3; Skin corrosion - Category 1B; Serious eye damage - Category 1

**Label Elements**

Signal Word:
DANGER! CORROSIVE!
Causes burns to mouth, oesophagus, and stomach.
Causes eye burns.
Causes skin burns.
Dust corrosive to respiratory tract.
Precautionary Statement(s):
Prevention:
Keep only in original packaging.
Do not breathe dusts or mists.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTRE or doctor.
Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.
Storage:
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Store in corrosive resistant container with a resistant inner liner.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | % | Synonyms |
|---|---|---|---|
| Sodium Metasilicate | 6834-92-0 | 95-99.5 | Anhydrous Metasilicate, Sodium Metasilicate Anhydrous |

## SECTION 4. FIRST-AID MEASURES

**First-aid Measures**

**Inhalation**

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by a qualified person. If respiration or pulse has stopped, have a trained person administer Basic Life Support (Cardio-Pulmonary Resuscitation and/or Automatic External Defibrillator) and CALL FOR EMERGENCY SERVICES IMMEDIATELY.

**Skin Contact**

Immediately flush contaminated area with water. Remove contaminated clothing, jewelry, and shoes immediately. Wash contaminated areas with soap and water. Thoroughly clean and dry contaminated clothing and shoes before reuse. GET MEDICAL ATTENTION IMMEDIATELY.

**Eye Contact**

Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Washing eyes within several seconds is essential to achieve maximum effectiveness. GET MEDICAL ATTENTION IMMEDIATELY.

**Ingestion**

Never give anything by mouth to an unconscious or convulsive person. If swallowed, do not induce vomiting. Give large amounts of water. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops.GET MEDICAL ATTENTION IMMEDIATELY.

**Immediate Medical Attention and Special Treatment**

**Special Instructions**

The absence of visible signs or symptoms of burns does NOT reliably exclude the presence of actual tissue damage.

## SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media**

Use medium appropriate for surrounding fire.

**Unsuitable Extinguishing Media**

None known.

**Specific Hazards Arising from the Product**

Negligible fire hazard
May be corrosive to Metals.

**Special Protective Equipment and Precautions for Fire-fighters**

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Methods and Materials for Containment and Cleaning Up**

Shovel dry material into suitable container. Wear appropriate personal protective equipment recommended in Section 8 of the SDS. Flush spill area with water, if appropriate. Liquid material may be removed with a vacuum truck. Wet material is slippery under foot. Keep out of water supplies and sewers. This material is alkaline and may raise the pH of surface waters with low buffering capacity. Releases should be reported if required to appropriate agencies.

## SECTION 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

Avoid creation of dust. Avoid breathing dust. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

**Conditions for Safe Storage**

Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated. Keep separated from incompatible substances.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters**

| | ACGIH TLV® | | OSHA PEL | | AIHA WEEL | |
|---|---|---|---|---|---|---|
| **Chemical Name** | **TWA** | **STEL** | **TWA** | **Ceiling** | **8-hr TWA** | **TWA** |
| Sodium Metasilicate | Not established | | Not established | | | |

Recommended Exposure Limit: 3 mg/m³ ceiling ( Internal Occupation Exposure Limit Based on Data from Analogues chemicals).

**Appropriate Engineering Controls**

Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

**Individual Protection Measures**

**Eye/Face Protection**

Wear safety glasses with side-shields. If eye contact is likely, wear chemical resistant safety goggles. When wet mixing, wear splash resistant safety goggles with a face shield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**Skin Protection**

Wear protective clothing to minimize skin contact. When potential for contact with wet material exists, wear Tychem® or smiliar chemical protective suit. When potential for contact with dry material exists, wear disposable coveralls suitable for dust exposure, such as Tyvek®. Wear appropriate chemical resistant gloves.

**Respiratory Protection**

A NIOSH approved respirator with high efficiency particulate air (HEPA) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of over exposure. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

| | |
|---|---|
| **Appearance** | White Granules. |
| **Odour** | Odourless |
| **Odour Threshold** | Not available |
| **pH** | 12.7 (1% solution) |
| **Melting Point/Freezing Point** | 1990 ºF (1088 ºC) (melting) |
| **Initial Boiling Point/Range** | Not applicable |
| **Vapour Pressure** | Not applicable |
| **Solubility** | Soluble in water; Not available (in other liquids) |

**Other Information**

| | |
|---|---|
| **Physical State** | Solid |
| **Molecular Formula** | Na2SiO3 |
| **Bulk Density** | 54 - 70 lb/ft3 |

## SECTION 10. STABILITY AND REACTIVITY

**Chemical Stability**

Yes.

**Possibility of Hazardous Reactions**

None known.

**Conditions to Avoid**

Contact with acids will cause evolution of heat. Carbon monoxide gas may form upon contact with reducing sugars, food and beverage products in enclosed spaces.

**Incompatible Materials**

Acids, prolonged contact with aluminum, brass, bronze, copper, lead, tin zinc or other alkali sensitive metals or alloys.

**Hazardous Decomposition Products**

None known.

## SECTION 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure**

Corrosive to respiratory tract, eyes, skin and digestive tract. May cause permanent eye damage. Harmful if swallowed.

**Acute Toxicity**

| Chemical Name | LC50 | LD50 (oral) | LD50 (dermal) |
|---|---|---|---|
| Sodium Metasilicate | | 847 mg/kg (rat) | |

**Skin Corrosion/Irritation**

Direct contact with wet material or by moist skin may cause severe irritation, pain, and possibly burns.

**Serious Eye Damage/Irritation**

Dust or mist may cause severe irritation, pain and corneal burns (possibly leading to blindness). The full extent of the injury may not be immediately apparent.

**STOT (Specific Target Organ Toxicity) - Single Exposure**

**Inhalation**

Inhalation of dusts may cause irritation of the upper respiratory tract with sore throat, coughing and shortness of breath. Upon contact with moist mucous membranes, sodium metasilicate is highly alkaline and may cause corrosive damage. May cause severe irritation of the respiratory tract with coughing, choking,pain, and possibly burns of the mucous membranes. In some cases, pulmonary edema and/or pneumonia may develop, either immediately or more often within 72 hours. They symptoms may include tightness in the chest, dyspnea, frothy sputum, cyanosis, and dizziness. Physical findings may include moist rales, low blood pressure, and high pulse pressure.

**Ingestion**

May cause immediate pain and severe burns of the esophagus and gastrointestinal tract with vomiting, nausea, and diarrhea. Edema of the epiglottis and shock may occur.

No information was located for: STOT (Specific Target Organ Toxicity) - Repeated Exposure, Respiratory and/or Skin Sensitization, Carcinogenicity, Development of Offspring, Sexual Function and Fertility, Effects on or via Lactation, Germ Cell Mutagenicity, Interactive Effects

## SECTION 12. ECOLOGICAL INFORMATION

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal Methods**

Reuse or recycle if possible. Dispose in accordance with all applicable regulations. May be subject to disposal regulations: U.S. EPA 40 CFR 261. Hazardous Waste Number(s): D002 (Corrosive).

## SECTION 14. TRANSPORT INFORMATION

| Regulation | UN No. | Proper Shipping Name | Transport Hazard Class(es) | Packing Group |
|---|---|---|---|---|
| Canadian TDG | UN3262 | Sodium Metasilicate Anhydrous (Sodium Metasilicate) | 8 | II |
| US DOT | UN3262 | Sodium Metasilicate Anhydrous (Sodium Metasilicate) | 8 | II |

**Special Precautions** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

## SECTION 15. REGULATORY INFORMATION

**Safety, Health and Environmental Regulations**

**Canada**

**WHMIS 1988 Classification**

Class E

E - Corrosive

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

**Additional Canadian Regulatory Lists**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

**USA**

**US OSHA HazCom 1994 Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200 (1994)).

## SECTION 16. OTHER INFORMATION

**SDS Prepared By** Integrity Chemical Solutions Inc.

**Phone No.** 403.988.7695

**Date of Preparation** March 3, 2022

**Disclaimer** This Health and Safety information is correct to the best of our knowledge and belief at the date of its publication, but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as guidance for safe handling, storage, and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment.