



Safety Data Sheet

Revision Date: March 31, 2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MA-281
 PRODUCT CODES: MA-281

MANUFACTURER: Seal Bond
 STREET ADDRESS: 14851 Michael Lane
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SECTION 2. HAZARDS IDENTIFICATION

Hazard Overview

NFPA 704 CODES: 0=Minimal, 1=Slight, 2=Moderate, 3=Serious; 4=Severe

HMIS III Codes: *=Chronic; 0=Minimal; 1=slight; 2=moderate; 3=high; 4=extreme

<u>HEALTH (BLUE)</u>	<u>FLAMMABILITY (RED)</u>	<u>REACTIVITY (YELLOW)</u>	<u>CLOTHING</u>
NFPA: 1	NFPA: 0	NFPA: 0	NFPA:
HMIS: 1	HMIS: 0	HMIS: 0	HMIS:



Signal Word: None

Alkaline. May cause eye, skin and respiratory irritation with overexposure. Use with adequate ventilation.
 Caution: Spills may be slippery. Large spills on surface dry to form glass film that can cut skin

ACUTE EFFECTS OF OVEREXPOSURE:

- EYE:** Causes irritation. Wear eye and face protection
 - SKIN:** Causes irritation or can cause delayed allergic skin reaction. Wear gloves
 - INHALATION:** Breathing mist may cause mild irritation to upper respiratory tract. Wear mask for prolonged exposure
 - INGESTION:** May cause irritation to mouth, esophagus, and stomach.
 - CHRONIC HAZARDS:** No known chronic hazards. Not listed by NTP, IARC or OSHA as a carcinogen.
 - PHYSICAL HAZARDS:** Spilled material is very slippery. Use caution in walking. Can etch glass.
- PRECAUTIONS:** Keep out of reach of children. Wear protective gloves, clothing, and eye/face protection

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>CHEMICAL INGREDIENTS</u>	<u>CAS NUMBER</u>	<u>% BY WT*</u>	
- Silicic acid, potassium salt	1312-76-1	≤10 %	VOC=0 grams/liter
- Trace Chemicals			<1.0 %
- Water	007732-18-5	Balance	



CHEMICAL FAMILY: Proprietary Water-based Solution of Modified Potassium Silicate Solution

*The concentrations shown in the substance list are maximum or ceiling levels (weight %) to be used for calculations for regulations. The components present in the balance of this product do not contribute any significant, additional hazards. All hazard information pertinent to this product has been presented in the remaining sections of this Safety Data Sheet, per the requirements of Federal Occupational Safety and Health Hazard Communication Standard (29CFR 1910.1200).

SECTION 4. FIRST AID MEASURES

- **EYE:** Immediately flush eyes with running water for at least 15 minutes. Seek medical attention.
- **SKIN:** In case of contact, immediately flush skin with plenty of soap and water for 15 minutes. Remove contaminated clothing. If adverse symptoms develop, seek medical attention. Discard or wash clothing before re-use.
- **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if breathing is difficult.
- **INGESTION:** If swallowed: DO NOT induce vomiting. Wash out mouth with water. Give 200-300 ml (half a pint) of water to drink. Get medical attention immediately. Do not give anything by mouth to an unconscious or convulsing person. Have physician determine whether vomiting or stomach evacuation is necessary.

SECTION 5. FIRE-FIGHTING MEASURES

FLASH POINT: Does not flash. Does not support combustion and is not considered a fire or explosive hazard

WATER SPRAY: Yes **FOAM:** Yes **HALON:** Yes **Explosion sensitivity to Mechanical Impact:** not sensitive

Explosion Sensitivity to Static Discharge: Not sensitive **Emergency responders :** These materials should be considered irritants. Can cause eye, skin, and digestive track irritation. Spray mist causes irritation to respiratory track or breathing difficulty from chemical decomposition. For these reasons, fire fighters should wear chemical goggles, full protective clothing, chemical resistant gloves, and rubber boots. Run off from fire control may cause pollution. If possible prevent run-off water from entering drains, water bodies, or environmentally sensitive areas.

SECTION 6. RELEASE MEASURES

Do not allow to enter drains, sewers or water ways. Spills may be slippery. Uncontrolled releases should be responded to by trained personnel. Proper protective equipment should be used. Contain spills immediately with polypads or absorbent material. Neutralize residue with sodium bicarbonate and water rinse. Transfer liquids and solid diking materials to suitable containers for recovery/disposal in accordance with all mandated waste regulations. Proper personal protective equipment for incidental releases. Self-contained breathing apparatus or respirator may be required if not well ventilated.

SECTION 7. HANDLING AND STORAGE

HANDLING: Handle in a well ventilated area. Open containers slowly on stable surface. Eyewash fountain should be within direct access. Avoid inhaling vapors and mists, and getting in eyes, on skin or on clothing. Wash hands and other contaminated areas thoroughly with soap and water after handling this product and before eating or smoking. Wash contaminated clothing and equipment thoroughly before reuse.

STORAGE: Store in cool dry location away from sources of intense heat or where freezing is possible. Do not store in aluminum, fiberglass, copper, brass, zinc or galvanized containers. Normal warehouse storage in a closed container is adequate. Storage temperature should be above freezing and below 120°F. Drain equipment and flush with water to clean. **Can etch glass if not promptly removed from glass surface.**



SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Silic acid, potassium salt: no occupational exposure limit assigned. An exposure limit of 2 mg/m³ (15 min TWA) recommended by analogy with potassium hydroxide. **VENTILATION AND ENGINEERING CONTROLS:** If required use a corrosion-resistant ventilation system separate from other exhaust ventilation systems to ensure that there is no potential for overexposure to sprays, or mists and that exposures are below those in section 2. Ensure eyewash/safety shower stations are available near areas where this product is used.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below exposure limits listed in Section 2 (Composition and Information on Ingredients). If respiratory protection is needed, use only protection authorized in 29 CFR 1910.134, or applicable State regulations. If adequate ventilation is not available or if there is potential for airborne exposure above the exposure limits (listed in Section 2) a respirator may be worn up to respirator exposure limitations, check with respirator equipment manufacturer's recommendations/limitations. For a higher level of protection use positive pressure supplied air respiration protection or self-contained breathing apparatus or if oxygen levels are below 19.5% or are unknown.

EYE PROTECTION: Splash goggles, safety glasses, face-shields recommended when the operation can generate splashes, sprays or mists.

HAND PROTECTION: Wear appropriate rubber gloves for routine industrial use and for spill response, as stated in Section 6.

BODY PROTECTION: Use body protection appropriate for task

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Thin liquid or gel	ODOR:	No Odor
pH:	(Typical) 11.3	BOILING POINT, 760 mm Hg:	≥212°F, 100°C
VAPOR PRESSURE, at 20 deg. C:	17.0 mm Hg	LIQUID DENSITY:	Approx. 1.08 g/cm ³ at 20°C
SOLUBILITY IN WATER, by wt.:	miscible	SPECIFIC GRAVITY (H₂O = 1):	1.1
VISCOSITY:	Approx. 100 mPa*s	PHYSICAL STATE:	Liquid or gel

SECTION 10. STABILITY AND REACTIVITY

STABILITY: Stable. **DECOMPOSITION PRODUCTS:** Thermal decomposition products of this solution can include carbon monoxide, carbon dioxide, and other compounds. Can react with sugar residues to form carbon monoxide.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Avoid water-reactive materials and heat. Product gels and generates heat when mixed with acids. May react with ammonium salts, zinc, tin and their alloys resulting in evolution of ammonia gas. Flammable hydrogen gas may be produced on contact with aluminum, tin, lead and zinc.

HAZARDOUS POLYMERIZATION: Will not occur by itself.

SECTION 11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:	Additional toxicology information for components greater than 1 percent in concentration is provided below. No Data
SUSPECTED CANCER AGENT:	The major components of this product are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC and are therefore not considered to be, nor suspected to be, cancer-causing agents by these agencies.
IRRITANCY OF PRODUCT:	This product is moderately irritating to contaminated tissue. All symptoms of acute toxicity due to high alkalinity.
SENSITIZATION TO THE PRODUCT:	Prolonged or repeated skin contact can result in the development of rashes, and other allergy-like symptoms.
REPRODUCTIVE TOXICITY INFORMATION:	Listed below is information concerning the effects of this product and its components on the human reproductive system



Mutagenicity: This product is not reported to produce mutagenic effects in humans.
Embryotoxicity: This product is not reported to produce embryotoxic effects in humans.
Teratogenicity: This product is not reported to cause teratogenic effects in humans.

Reproductive Toxicity: This product is not reported to cause reproductive effects in humans
BIOLOGICAL EXPOSURE INDICES: Currently there are no Biological Exposure Indices (BEIs) associated with the components of this product.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Skin disorders can be aggravated by over-exposure to this product.
Inhalation of this products mists may aggravate respiratory conditions.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate over-exposure to this product.

SECTION 12. ECOLOGICAL INFORMATION

High pH harmful to aquatic life. All work practices must be aimed at eliminating environmental contamination. Eco toxicity of potassium silicate has not been tested.

SECTION 13. WASTE DISPOSAL

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

SECTION 14. Transport Information

-DOT SHIPPING NAME (49CFR 172.101): Non Flammable Liquid, NOS, Water Based Mixture of Silicates, Not regulated
- DOT ID# (49CFR 172.101): Non-Regulated
- DOT HAZARD CLASS: Non Flammable Liquid, NOS
- MARKING: None Required - LABEL: None Required - PLACARD: None Required
- HAZARD (29 CFR 1910.1200): Non-Flammable HS TARIFF CLASS CODE: 3214.90

SECTION 15. REGULATORY INFORMATION

FEDERAL This product is non-hazardous under the OSHA Hazard Communication Standard (29 CFR 1910-1200). All components are on the Confidential or Non-Confidential TSCA Inventory List. Ingredients of this product are listed on the Toxic Substances Control Act (TSCA) inventory and do not have special toxic substances warning requirements.

None of the components in this product require notification of the National Response Center under the Comprehensive Environmental Response Compensation, and Liability Act of 1980 (CERCLA) per 40 CFR 302.4. None of the components in this product require reporting under Superfund Amendment and Reauthorization Act of 1986 (SARA) Title III as emergency planning or release reporting per 40 CFR 355 (used for SARA 302, 304, 311 and 312). The components also do not require annual reporting as a toxic chemical under SARA Title III per 40 CFR 372 (for SARA 313). This product contains no chemicals subject to SARA Title III, Section -13, Part 372 reporting requirements.

STATE RIGHT-TO-KNOW: Under **California Proposition 65**, this product contains no listed substances at levels which would require a warning as a product known to cause cancer, birth defects or other reproductive harm.
Under the **Massachusetts Right-To-Know Law**, this product contains no listed substances at levels that require reporting per the Substance List.
Under the **Pennsylvania Right-To-Know Law**, this product contains no listed substances at levels that require reporting per the Hazardous Substance List.



SECTION 16. OTHER INFORMATION

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All terms and abbreviations have been defined in various government publications, or are standard chemical terms used by IUPAC. The data and recommendations herein are based upon our research and the research of others, and are believed to be accurate. However, no warranty or guarantee of their accuracy is made; and the products are distributed without warranty, expressed or implied, including the limited warranties of merchantability of fitness for particular purpose. Neither this data sheet nor any statement contained herein grants or extends any license, express or implied, in connection with patents issued or pending which may be the property of the manufacturer or others. The manufacturer makes no warranties, expressed or implied, as to the accuracy or adequacy of the information contained herein. The manufacturer shall not be liable to the vendee, the vendee's employees or anyone for any direct, special or consequential damages arising out of or in connection with this accuracy, adequacy or furnishing of such information.

1	HEALTH/SALUD
0	FLAMMABILITY
0	REACTIVITY