

Deep Seal**MATERIAL SAFETY DATA SHEET**

Effective Date: 1/1/12

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Emergency # (479) 255-6101

SECTION I: IDENTIFICATION

PRODUCT NAME: Deep Seal
 CHEMICAL NAME & SYNONYMS: Chemical Hardener, Densifier, Soluble Chloride Reducer/ Water Based Mixture of Modified Silicates.
 PROCESSORS NAME: VanHearron Inc. 410 S. Coker, Greenwood, AR 72936 Phone: (479) 255-6101
 CAS #: Not Issued
 CHEMICAL FAMILY: Water Solution of Modified Potassium Silicate Solution
 CHEMICAL FORMULA: Proprietary Water Based Mixture of Modified Silicates

SECTION II: COMPONENTS

INGREDIENTS	CAS NUMBER	% BY WT*
Silicic acid, potassium salt; Potassium Silicate	1312-76-1	<15 %
Trace Chemicals		<1.0 %
Water	007732-18-5	Balance

*The concentrations shown in the substance list are maximum or ceiling levels (weight %) to be used for calculations for regulations.

SECTION III: HEALTH HAZARDS

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

HEALTH (BLUE)	FLAMMABILITY (RED)	REACTIVITY (YELLOW)	CLOTHING
NFPA: 1 HMIS: 1	NFPA: 0 HMIS: 0	NFPA: 0 HMIS: 0	NFPA: HMIS: PP = B

ACUTE EFFECTS OF OVEREXPOSURE:

EYE: Causes irritation.
 SKIN: Causes irritation.
 INHALATION: Breathing mist may cause mild irritation to upper respiratory tract.
 INGESTION: May cause irritation to mouth, esophagus, and stomach. Do not ingest.
 CHRONIC HAZARDS: No known chronic hazards. Not listed by NTP, IARC or OSHA as a carcinogen.
 PHYSICAL HAZARDS: Dries to form glass film which can easily cut skin. Spilled material is very slippery. Can etch glass.

SECTION IV: 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. Remove contaminated clothing and shoes. If adverse symptoms continue, seek medical attention.
 INHALATION: Remove to fresh air. Get medical attention if breathing is difficult.
 INGESTION: If swallowed, DO NOT induce vomiting. Get medical attention immediately.

SECTION V: FIRE AND EXPLOSION HAZARD DATA

Does not support combustion and is not considered a fire or explosive hazard. This material is compatible with all extinguishing media. These materials should be considered irritants. Causes eye, skin, and digestive track irritation. Spray mist causes irritation to respiratory track. For these reasons, fire fighters should wear chemical goggles, full protective clothing, chemical resistant gloves, and rubber boots.

SECTION VI: SPILL, LEAK & DISPOSAL PROCEDURES

Contain spills immediately with inert material to prevent waterway entry. Transfer liquids and solid diking materials to suitable containers for recovery or disposal.

SECTION VII: HANDLING AND STORAGE

Handle in a well ventilated area. Safety shower and 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. 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. CAUTION: Can etch glass if not promptly removed.

SECTION VIII: PERSONAL PROTECTION

Appropriate personal protective equipment necessary to prevent repeated or prolonged contact should be worn. Use with adequate ventilation. Avoid breathing mist or vapors. Where high concentrations of mist occur, a respirator with appropriate dust and mist removal capabilities is recommended. Eye protection, resistant clothing and resistant boots should be worn where spills or splashing can occur. Chemical splash goggles are recommended. A single prolonged skin exposure is not likely to result in skin irritation or absorption through the skin in harmful amounts. Wash contaminated clothing before reuse. Do not take internally. An eye wash station should be available.

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Thin liquid
ODOR:	No Odor
pH:	(Typical) 11.3
BOILING POINT, 760 mm Hg:	212 deg F, 100 deg C
VAPOR PRESSURE, at 20 deg. C:	17.0 mm Hg
LIQUID DENSITY:	Approx. 1.08 g/cm ³ at 20 deg C
SOLUBILITY IN WATER, by wt.:	miscible
SPECIFIC GRAVITY (H ₂ O = 1):	1.1
VISCOSITY:	Approx. 100 mPa*s
PHYSICAL STATE:	Liquid

SECTION X: STABILITY AND REACTIVITY

Stable under all conditions of use and storage. Product gels and generates heat when mixed with acid. May react with ammonium salts resulting in evolution of ammonia gas. Flammable hydrogen gas may be produced on contact with aluminum, tin, lead and zinc.

SECTION XI: TOXICOLOGICAL INFORMATION

This product is known to be a mild eye and upper respiratory irritant. When tested for primary skin irritation potential, similar potassium silicate solution produced no irritation to intact skin, but well defined irritation to abraded skin. Human experience confirms that irritation occurs when potassium silicates get on clothes at the collar, cuffs or other areas where abrasion may occur. Do not take internally, avoid breathing mist and minimize eye and skin contact.

HEALTH HAZARD CATEGORIES: None of the product's ingredients are found on any lists of hazardous, carcinogenic or banned chemical agents or materials generated by them.

SECTION XII: ECOLOGICAL INFORMATION

Overspray on non-targeted areas can be easily removed with soap and water. Ecotoxicity of potassium silicate has not been tested. High pH harmful to aquatic life.

SECTION XIII: DISPOSAL CONSIDERATIONS

The material is non-hazardous. Small quantities may be cleaned with soap and water. Flush neutral liquid to a sanitary or industrial sewer in accordance with federal, state and local regulations. Absorbent material containing small amounts of the material may be disposed in appropriate land fills. Disposal of large quantities should comply with applicable disposal permits. Do not introduce large amounts into purification plants.

SECTION XIV: TRANSPORTATION INFORMATION

DOT SHIPPING NAME (49CFR 172.101): Non Flammable Liquid, NOS, Water Based Mixture of Silicates
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
INTERNATIONAL HARMONIC CODE: 3402

SECTION XV: 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 XVI: OTHER INFORMATION

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.

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