

# **ZACLON LLC** **MATERIAL SAFETY DATA SHEET**

**IDENTIFICATION****NAME** Zacsil® Solution**GRADES**30, 865, 18, Electronics 200,  
865 D, Zacsil AG**CAS NAME**Silicic Acid, Potassium Salt  
(Water Solution)**CHEMICAL FAMILY**

Silicate

**COMMON NAME**

Water Glass

**CAS REGISTRY NO.**

1312-76-1

**MANUFACTURER/DISTRIBUTOR**

Zaclon LLC

**TRANSPORTATION EMERGENCY PHONE**

CHEMTREC (800) 424-9300

**ADDRESS**2981 Independence Road  
Cleveland, Ohio 44115**PRODUCT INFORMATION PHONE**

(800) 356-7327

**PHYSICAL DATA****BOILING POINT, 760 MM Hg**

100 °C (212 °F)

**MELTING POINT**

0 °C (32 °F)

**SPECIFIC GRAVITY**

1.26 to 1.39

**VAPOR PRESSURE**

Vapor is water

**VAPOR DENSITY**

Not volatile

**SOLUBILITY IN H<sub>2</sub>O 29-39%**

Complete

**pH INFORMATION**

11 to 12

**EVAPORATION RATE  
(BUTYL ACETATE=1)**

&lt; 1

**FORM**

Liquid

**APPEARANCE**

Clear

**COLOR**

Colorless

**ODOR**

Odorless

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The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

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**COMPONENTS**

<b><u>MATERIAL(S)</u></b>	<b><u>APPROXIMATE %</u></b>
Potassium Silicate	28-41%
Water	59-72%

**HAZARDOUS REACTIVITY**

<b>INSTABILITY</b>	Stable
<b>INCOMPATIBILITY</b>	Keep away from strong acids
<b>DECOMPOSITION</b>	Will not occur.
<b>POLYMERIZATION</b>	Will not occur.

**FIRE AND EXPLOSION DATA**

<b>FLASH POINT</b> Will not burn.	<b>FLAMMABLE LIMITS IN AIR % BY VOL.</b>
	<b>LOWER</b> Not applicable.
<b>AUTOIGNITION TEMPERATURE</b> Not applicable.	<b>UPPER</b> Not applicable.

**FIRE AND EXPLOSION HAZARDS** None

**AUTODECOMPOSITION TEMPERATURE** Not applicable

**EXTINGUISHING MEDIA** As appropriate for combustibles in area.

**SPECIAL FIRE FIGHTING INSTRUCTIONS** None.

**HEALTH HAZARD INFORMATION**

**PRINCIPAL HEALTH HAZARDS** (Including Significant Routes, Effects, Symptoms of Over-Exposure, and Medical Conditions Aggravated by Exposure)

Potassium silicate solutions are severe eye irritants and prolonged or repeated contact may cause skin irritation.

**CARCINOGENICITY**

Not listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.

**EXPOSURE LIMITS** [PEL (OSHA), TLV (ACGIH), ETC.]

Exposure limits for potassium silicate solutions have not been established by OSHA or ACGIH.

**SAFETY PRECAUTIONS**

Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

**FIRST AID**

In case of contact: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician. Flush skin with water. Remove contaminated clothing and wash before reuse and discard shoes.

If swallowed: Do not induce vomiting. Immediately give two glasses of water or activated charcoal slurry. Call a physician. Never give anything by mouth to an unconscious person.

NOTE: To prepare activated charcoal slurry, suspend 50 gm of activated charcoal in 400 ml of water in a bottle and shake well.

### **PROTECTION INFORMATION**

**GENERALLY APPLICABLE CONTROL MEASURES** Good general ventilation should be provided. Avoid floor spills - see Spill, Leak, or Release below.

**PERSONAL PROTECTIVE EQUIPMENT** Coverall, chemical splash goggles and rubber gloves.

### **DISPOSAL INFORMATION**

**SPILL, LEAK OR RELEASE** Spill area will be slippery; use care to avoid falling. Flush spill area with plenty of water.

**WASTE DISPOSAL** Comply with Federal, State, and local regulations. If approved, may be flushed to sewer to waste treatment area.

### **SHIPPING INFORMATION**

#### **DOT/IMO**

**PROPER SHIPPING NAME** Not regulated as a hazardous material

**HAZARD CLASS** Not regulated.

### **OTHER INFORMATION**

**SHIPPING CONTAINERS** 55 gallon steel drums; 55 gallon PE drums; tank cars; tank trucks; totes.

**STORAGE CONDITIONS** Store in a cool place. Keep drums tightly closed to avoid evaporation. Keep from freezing (freeze point below 0 °F /-35 °C)

### **NPCA-HMIS RATINGS**

Health	2
Flammability	0
Reactivity	0
Personal Protection	--
Personal Protection rating to be supplied by the user depending on use conditions.	

### **ADDITIONAL INFORMATION AND REFERENCES**

For further information see Zaclon "Potassium Silicate" Data Sheet.

**DATE OF LATEST REVISION/REVIEW:** May 2008

**PERSON RESPONSIBLE FOR MSDS:** J.L. Curry

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