

Material Safety Data Sheet

Material Name: Zacsil Solution

Grades: 30, 865, 18, Electronics 200, 865 D, Zacsil AG

*** Section 1 - Chemical Product and Company Identification ***

Manufacturer Information

Zaclon LLC
2981 Independence Road
Cleveland, OH 44115

Phone: 216-271-1569 or 800-356-7327
Fax: 216-271-1792
Emergency # 800-424-9300 CHEMTREC

*** Section 2 - Hazards Identification ***

Emergency Overview

May cause eye and skin irritation.

Potential Health Effects: Eyes

May cause severe eye irritation.

Potential Health Effects: Skin

Prolonged or repeated contact may cause skin irritation.

Potential Health Effects: Ingestion

Not considered a likely route of exposure under normal product use conditions. May cause gastrointestinal irritation if ingested.

Potential Health Effects: Inhalation

May cause respiratory tract irritation.

HMIS Ratings: Health: 2 Fire: 0 HMIS Reactivity 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component	Percent
7732-18-5	Water	59-72
1312-76-1	Potassium silicate	28-41

*** Section 4 - First Aid Measures ***

First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

First Aid: Skin

Flush skin with water. Remove contaminated clothing and wash before reuse and discard shoes.

First Aid: Ingestion

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.

First Aid: Inhalation

Move person to non-contaminated air. If the affected person is not breathing, apply artificial respiration.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

See Section 9 for Flammability Properties.
Will not burn.

Hazardous Combustion Products

Not determined

Extinguishing Media

Use appropriate extinguishing media for surrounding fire.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

NFPA Ratings: Health: 2 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

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*** Section 6 - Accidental Release Measures ***

Containment Procedures

Stop the flow of material, if this is without risk.

Clean-Up Procedures

Spill area will be slippery; use care to avoid falling. Flush spill area with plenty of water.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

None

*** Section 7 - Handling and Storage ***

Handling Procedures

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

Storage Procedures

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

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

Engineering Controls

Good general ventilation should be provided.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Use chemical splash goggles.

Personal Protective Equipment: Skin

Wear coveralls and rubber gloves.

Personal Protective Equipment: Respiratory

None needed under normal product use conditions.

Personal Protective Equipment: General

Eye wash fountain and emergency showers are recommended.

*** Section 9 - Physical & Chemical Properties ***

Appearance:	Clear, colorless	Odor:	None
Physical State:	Liquid	pH:	11-12
Vapor Pressure:	ND	Vapor Density:	NA
Boiling Point:	100°C (212°F) at 760 mm Hg	Melting Point:	NA
Solubility (H2O):	Soluble	Specific Gravity:	1.26-1.39
Freezing Point:	0°C (32°F)	Evaporation Rate:	<1
VOC:	ND	Octanol/H2O Coeff.:	ND
Flash Point:	NA	Flash Point Method:	NA
Upper Flammability Limit (UFL):	NA	Lower Flammability Limit (LFL):	NA
Burning Rate:	NA	Auto Ignition:	NA

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

None

Incompatibility

Strong Acids.

Hazardous Decomposition

Will not occur.

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Possibility of Hazardous Reactions

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

Water (7732-18-5)

Oral LD50 Rat >90 mL/kg

Potassium silicate (1312-76-1)

Oral LD50 Rat 1300 mg/kg

Carcinogenicity

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Potassium silicate (1312-76-1)

Test & Species

96 Hr LC50 Lepomis macrochirus

301-478 mg/L

96 Hr LC50 Brachydanio rerio

3185 mg/L [semi-static]

96 Hr EC50 Daphnia magna

216 mg/L

Conditions

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

All wastes must be handled in accordance with local, state and federal regulations.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Not regulated.

*** Section 15 - Regulatory Information ***

US Federal Regulations

Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations

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Component Analysis - State

None of this product's components are listed on the state lists from CA, MA, MN, NJ, PA, or RI.

Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

Additional Regulatory Information

Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Water	7732-18-5	Yes	DSL	EINECS
Potassium silicate	1312-76-1	Yes	DSL	EINECS

* * * Section 16 - Other Information * * *

Other Information

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.