

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product Name: Con-Lith 3
Other Means of Identification: CS CL3-20

Recommended Product Use: Concrete floor densifier
Restrictions on Use: None known

Manufacturer/Importer/Supplier/Distributor Information:

Company: Con-Spec Industries Ltd.
Address: 9525 - 63 Avenue NW
Edmonton, Alberta T6E 0G2

Contact: Robert Lummerding
Telephone: 1 (780) 437-6136
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E-Mail: conspec@shaw.ca

Emergency Telephone: CANUTEC (613) 996-6666

SECTION 2. HAZARD(S) IDENTIFICATION

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

Classification: Not classified as dangerous for supply/use
Eye Irritant Category 2

Hazards Summary: Alkaline. May cause irritation to skin and eyes.
Caution - spillages may be slippery. Dries to form glass film which can easily cut skin.

Label Elements:

Hazard Symbol: None

Signal Word: None

Hazard Statement: None

Precautionary Statement: None

Hazards Not Otherwise Classified: Dries to form glass film which can easily cut skin. Can etch glass if not promptly removed.

SAFETY DATA SHEET
Con-Lith 3**SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS****Mixtures:**

Chemical Identity	CAS Number	Content in Percent (%)*
Silicic acid, potassium salt	1312-76-1	1-10
Water	7732-18-5	90-99

Composition comments: *All concentrations are percent by weight unless ingredient is a gas.

SECTION 4. FIRST-AID MEASURES

- Inhalation:** Remove patient from exposure, keep warm and at rest. Obtain medical attention.
- Skin Contact:** Wash affected skin with plenty of water. If symptoms develop, obtain medical attention.
- Eye Contact:** Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.
- Ingestion:** Do not induce vomiting. Wash out mouth with water and give 200-300 ml (half a pint) of water to drink. Obtain medical attention.

Most Important Symptoms/Effects, Acute and Delayed:

Alkaline. Irritating to eyes and skin. The toxicity of sodium silicate is dependent on the silica to alkali ratio and on the pH.

Immediate Medical Attention and Special Treatment:

Obtain immediate medical attention.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable Extinguishing Media:** Compatible with all standard fire fighting techniques.
- Unsuitable Extinguishing Media:** None known.
- Specific Hazards Arising from the Chemical:** Not applicable. Aqueous solution. Non-combustible.

SAFETY DATA SHEET

Con-Lith 3

SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions,
Protective Equipment and
Emergency Procedures:**

Wear suitable protective clothing. Wear eye/face protection.

**Methods and Material for
Containment and Cleaning
Up:**

Caution - spillages may be slippery. Contain spillages with sand, earth or any suitable adsorbent material. Transfer to a container for disposal or recovery.

Environmental Precautions:

Do not allow to enter drains, sewers or watercourses. Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:

Avoid contact with eyes, skin and clothing. Avoid generation of mist. Provide adequate ventilation. Emergency shower and eye wash facilities should be readily available. See Also Section 8

**Conditions for Safe Storage,
Including any Incompatibilities:**

Storage temperature 0-95° C. Loading temperature 45-95 ° C. Do not allow material to freeze. Provide an adequate bund wall. Unsuitable containers: Aluminium. See Also Section 10.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Control Parameters
Occupational Exposure Limits**

Chemical Name	Type	Exposure Limit Values	Source
Silicic acid, potassium salt		No Occupational Exposure Limit assigned.	
Silicic acid, potassium salt	TWA (15 minute)	An exposure limit of 2 mg/m ³ is recommended by analogy with potassium hydroxide	UK EH40

Consult local authorities for provincial or state exposure limits.

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value.

TWA = Time-Weighted Average. STEL = Short-term Exposure Limit. A4 = Not classifiable as a human carcinogen.

OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits.

OEL = Occupational Exposure Limits. REL: Recommended Exposure Limit

SAFETY DATA SHEET

Con-Lith 3

Page 4 / 6

Appropriate Engineering Controls:	Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.
Personal Protection	
General Information:	Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place.
Eye Protection:	Chemical goggles.
Skin Protection:	Wear suitable protective clothing and gloves. Plastic or rubber gloves. Wear suitable overalls.
Respiratory:	Respiratory protection not normally required. Advice on respiratory protective equipment is given in the HSE (Health and Safety Executive) publication HS(G)53.
Environmental Exposure Controls:	The primary hazard of sodium silicate is the alkalinity. Avoid release to the environment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical State:	Liquid
Form:	Liquid
Color:	Clear
Odour:	None
Odour Threshold:	Not applicable
PH:	11.3
Melting Point/Freezing Point:	Not applicable
Initial Boiling Point and Boiling Range:	100
Flash Point:	Not applicable
Evaporation Rate:	Not applicable
Flammability (solid, gas):	Not applicable
Explosive limit Ranges:	Not applicable
Vapour Pressure:	Not applicable
Vapour Density:	No Data
Bulk Density:	1.1 g/cm ³ (20°C)
Solubility(ies)	
Solubility in Water:	Soluble
Solubility (other):	No Data
Partition Coefficient (n-octanol/water):	No Data
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	Not applicable
Viscosity:	Not applicable
Explosive Properties:	Not applicable
Oxidizing Properties:	Not applicable

SAFETY DATA SHEET
Con-Lith 3

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability:	Stable.
Possibility of Hazardous Reactions:	When arc welding vessels containing aqueous solutions of this material, take care to control any explosion risk from hydrogen evolved by electrolysis. Aqueous solutions will react with aluminium, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air. Can react violently if in contact with acids. Can react with sugar residues to form carbon Monoxide.
Conditions to Avoid:	See above Possibility of Hazardous Reactions.
Incompatible Materials:	See above Possibility of Hazardous Reactions.
Hazardous Decomposition Products:	None known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

Ingestion

All symptoms of acute toxicity are due to high alkalinity. Material will cause irritation. Oral LD50 (rat) >5000 mg/kg bw

Inhalation

Mist is irritant to the respiratory tract. All symptoms of acute toxicity are due to high alkalinity. Inhalation LC50 (rat) >2.06 g/m³

Skin Contact

Repeated and/or prolonged skin contact may cause slight Irritation. Dermal LD50 (rat) >5000 mg/kg bw

Eye Contact

Liquid or mist may cause discomfort and mild irritation.

Skin corrosion/irritation

Repeated and/or prolonged skin contact may cause slight Irritation.

Serious eye damage/irritation

Liquid or mist may cause discomfort and mild irritation.

Sensitization

Not sensitizing.

Mutagenicity

No evidence of genotoxicity. In vitro/in vivo negative.

Carcinogenicity

No structural alerts. IARC, NTP, OSHA, ACGIH do not list this product as known or suspected carcinogen.

Reproductive toxicity

No evidence of reproductive toxicity or developmental toxicity.

STOT - single exposure

Not classified

STOT - repeated exposure

Not classified. NOAEL oral (rat) >159 mg/kg bw/d

Aspiration hazard

Not classified

SAFETY DATA SHEET

Con-Lith 3

SECTION 12. ECOLOGICAL INFORMATION

- Aquatic Toxicity:** Fish (Leuciscus idus) LC50 (48 hour) >146 mg/l
Aquatic invertebrates: (Daphnia magna) EC50 (24 hour) >146 mg/l
- Persistence and degradability:** Inorganic. Soluble silicates, upon dilution, rapidly depolymerise into molecular species indistinguishable from natural dissolved silica.
- Bioaccumulative potential:** Inorganic. The substance has no potential for bioaccumulation.
- Mobility in soil:** Not applicable.
- Results of PBT and Vpvp assessment:** Not classified as PBT or vPvB.
- Other adverse effects:** The alkalinity of this material will have a local effect on ecosystems sensitive to changes in pH.

SECTION 13. DISPOSAL CONSIDERATIONS

- Contaminated Packaging:** Dispose of this material and its container to hazardous or special waste collection Point. Disposal should be in accordance with local, state or national legislation.

SECTION 14. TRANSPORT INFORMATION

- TDG:** Not regulated as dangerous goods.
- UN Shipping Name:** Not Regulated
Classification: N/A
UN: N/A
Packing Group: N/A

SECTION 15. REGULATORY INFORMATION

- WHMIS Classification:** According to Controlled Products Regulations (CPR) (SOR/88-66)
Not WHMIS controlled.

SECTION 16. OTHER INFORMATION

- Revision Date:** May 29, 2019
Version #: 1.0

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