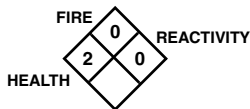


MATERIAL SAFETY DATA SHEET and WARRANTY

B424-9A01

Date: January 1, 2009

Section I Identification



HEALTH	[2]
FLAMMABILITY	[0]
REACTIVITY	[0]
PROTECTION	[G]

Product Name:	SCOFIELD® Formula One™ Lithium Densifier MP
Chemical Name:	Mixture
Chemical Family:	Alkali Silicate Mixture
Chemical Formula:	Mixture
Emergency Telephone Number:	CHEMTREC (800) 424-9300
Telephone Number for Information:	SCOFIELD (770) 920-6000 (323) 720-3000

Section II Composition/ Information on Ingredients

Composition	Weight	OSHA TWA	ACGIH TLV	CAS Number
Silicic Acid, Lithium Salt	10–30%	NE	NE	12627-14-4

NE = Not established

Section III Hazards Identification

Emergency Overview:
Causes moderate eye, skin and digestive tract irritation. In a confined area, vapors in high concentrations may cause headache, nausea, or dizziness. Spray mist causes irritation to respiratory tract. Harmful to aquatic life. Possible developmental hazard. Contains lithium that may adversely affect the developing fetus.

Signs and Symptoms of Exposure:
Inhalation — **Irritation to the respiratory tract, headache, and dizziness.**
Eyes — **Redness, irritation, and eye watering.**
Skin — **Redness and irritation.**
Ingestion — **Nausea, vomiting, diarrhea, and dizziness.**

Medical Conditions Generally Aggravated by Exposure: **Dermatitis, eye disease.**

Section IV First Aid Measures

Emergency and First Aid Procedures:
Inhalation — **Move to fresh air.**
Skin — **Wash thoroughly with soap and water. Remove soiled clothing and footwear and wash before reuse.**
Ingestion — **If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person.**
Eyes — **DO NOT RUB EYES. Flush IMMEDIATELY with large amounts of water while holding eyelids apart. Get medical attention**

If symptoms persist or develop, get medical attention.

Section V Fire and Explosion Hazard Data

Flash Point (Method Used):	Not combustible
Flammable Limits:	Not determined

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Section V Fire and Explosion Hazard Data (continued)

Extinguishing Media:	Water spray, dry chemical, foam, and CO ₂ .
Special Fire Fighting Procedures:	Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Cool tightly closed containers exposed to fire with water.
Unusual Fire and Explosion Hazards:	Closed containers may rupture due to high buildup of pressure and weakening of the container structure when exposed to extreme heat.

Section VI Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: **Only qualified personnel who have read the product Tech-Data Bulletins and this MSDS should conduct these procedures. Persons not wearing protective equipment should be excluded from the area. Follow procedures in *Section VIII—Exposure Controls/Personal Protection*. Liquid material spills may be slippery.**

Cordon off area if necessary to prevent unauthorized traffic or entry. Promptly dike to prevent spreading and stop spill at source. Collect with wet vacuum or absorb with inert material and place in labeled waste container for disposal together with all contaminated matter or equipment. If unable to prevent release to soil or waters of the State, immediate notice to local regulatory authorities is required.

Section VII Precautions for Safe Handling and Use

Precautions to be Taken in Handling and Storing: **Follow personal protection procedures (*Section VIII*) when handling the material. Store upright in a cool, dry, well-ventilated area, in tightly closed containers away from combustible materials and sources of heat. Avoid freezing. Once frozen, do not use. Store between 45° F and 120° F. Protect from physical damage. Labels must not be removed from containers. Product should only be stored in original containers.**

Section VIII Exposure Controls/ Personal Protection

Ventilation/Engineering Controls: **Adequate ventilation and sufficient local exhaust as needed to maintain exposure below TWA and TLV limits.**

Respiratory Protection: **Wear P100 respirator (NIOSH TC-84A approved). 3M Company's Tech Line (1-800-243-4630) may be helpful for respirator advice and availability. For respiratory protection guidelines refer to OSHA 29 CFR 1910.134.**

Eye Protection: **Wear chemical-splash goggles.**

Skin Protection: **Wear impervious, chemical-resistant gloves (PVC or Nitrile).**

Other Protective Clothing or Equipment: **Wear suitable protective clothing, chemical-resistant apron and boots to avoid skin contact.**

Work/Hygienic Practices: **Minimize exposure in accordance with good hygienic practice. Wash with soap and water immediately after handling.**

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Section IX Physical and Chemical Characteristics

Appearance:	Clear liquid
Odor:	Slight odor
pH:	Approximately 10–12
Vapor Pressure (mm Hg.):	Of water
Vapor Density (Air = 1):	Of water
Boiling Point:	Approximately 212° F
Freezing Point:	Approximately 32° F
Solubility in Water:	Soluble
Specific Gravity (H ₂ O = 1):	Approximately 1.1
Evaporation Rate (Butyl Acetate = 1):	Of water
Odor Threshold:	Not determined
Volatile Organic Compounds:	None

Section X Stability and Reactivity

Stability:	Stable
Conditions to Avoid:	Freezing. Excessive heat or open flame.
Incompatibility (Materials to Avoid):	Acids, metal salts, strong oxidizing agents. Flammable hydrogen gas may be produced on contact with aluminum, tin, lead, and zinc.
Hazardous Decomposition or By-products:	CO and CO ₂ , aldehydes, ketones may be produced.
Hazardous Polymerization:	Will not occur.

Section XI Toxicological Information

Health Hazards (Acute and Chronic):

- Repeated ingestion or ingestion of large doses of soluble lithium compounds is reported to cause temporary mental function impairment.**
- There are no ingredient raw materials at 0.1% or greater listed as potential carcinogens by OSHA, IARC, or NTP.**
- Repeated ingestion or ingestion of large doses of soluble lithium compounds during pregnancy is reported to cause fetal abnormalities.**
- No synergistic products or effects are known.**

Section XII Ecological Information

Aquatic Toxicity Rating:
Harmful to aquatic life. LC₅₀ aquatic toxicity rating not determined. Precautions should be taken to prevent the accidental release of this material to the environment.

Section XIII Disposal Considerations

Waste Disposal Method: **Follow personal protection procedures (*Section VIII*) when disposing of material. Disposal of all residual product, used absorbent materials, and discarded equipment must be in accordance with all applicable federal, state, and local regulations.**

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Section XIII Disposal Considerations (continued)

Waste Disposal Method (continued): **Scofield cannot make specific recommendations for disposal in any particular locality. The user is cautioned to be thoroughly familiar with all applicable requirements before use. Without endorsement of any particular waste disposal company, Scofield offers the following companies as possible resources for the disposal of industrial or hazardous waste:**

Veolia Environmental 1-800-426-2382 Heritage Environmental 1-800-827-4374
Companies who dispose of hazardous waste may also be found on the Internet using "Hazardous Waste Disposal" as key search words.

Section XIV Transport Information

DOT Hazard Class:
Not regulated

Section XV Regulatory Information

U.S. Federal Regulations: **This product contains a chemical subject to the reporting requirements of Sections 311–312 of Title III of the *Superfund Amendments and Reauthorization Act*.**

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, material safety data sheets, training, and access to written records. It is your legal duty to make all information in this *Material Safety Data Sheet* available to your employees.

State Regulations: **State of California *Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)*; WARNING: This product contains one or more chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.**

For all state regulations, please check with the appropriate state agency.

WHMIS Classification: **Not determined.**

International Regulations: **Consult the regulations of the importing country.**

Section XVI Other Information

Before using this product:
Completely read the Scofield Tech-Data Bulletin *B-424 SCOFIELD Formula One Lithium Densifier MP* and the container label.

WARRANTY

Since no control is exercised over product use, L. M. Scofield Company (Scofield) represents and warrants only that its products are of consistent quality within manufacturing tolerances. NO OTHER ORAL OR WRITTEN REPRESENTATION OR STATEMENT OF ANY KIND, EXPRESS OR IMPLIED, NOW OR HEREAFTER MADE IS AUTHORIZED OR WARRANTED BY SCOFIELD, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Liability for breach of contract, negligence, or on any other legal basis is limited to the lesser of refund or replacement of defective materials. SCOFIELD WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING FOR DELAYS OR LOST PROFITS. Communication of this warranty and its limitations to end users is not the responsibility of Scofield, but should be communicated by those in direct contract with the end user. Any claim regarding product defect must be received in writing within one year from the date of manufacture. No claim will be considered without such written notice or after the specified time interval. The end user shall determine the suitability of the products for the intended use and assumes all risks and liability in connection therewith.