



MATERIAL SAFETY DATA SHEET

Trade Name: ActiVis LSR™

Revision Date: 1/8/07

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: ActiVis LSR™
Chemical Family: Mixture
Applications: Oil well drilling fluid additive
Emergency Telephone (24 hr.): (ChemTrec) 800-424-9300
Supplied by: MASI Technologies, LLC
P.O. Box 811217
Lafayette, LA 70598-1127
Tel. No. (866) 494-5444
www.masitech.com

Revision Number: 3

HMIS Rating
Health: 2* **Flammability:** 0 **Physical Hazard:** 0 **PPE:** E

HMIS Key: 4=Severe, 3=Serious, 2=Moderate, 1=Slight, 0=Minimal Hazard. *Chronic effects - See Section 11. See Section 8 for Personal Protective Equipment recommendations.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	CAS No.	Wt. %	Ingredient Comments
Sepiolite	63800-37-3	60 – 100	No comments
Silica, crystalline, quartz	14808-60-7	0.1 – 1	No comments
Water soluble polymer		1 – 5	No comments
Sodium carbonate	497-19-8	10 – 30	No comments

3. HAZARDS IDENTIFICATION

Emergency Overview: Warning! May cause severe eye irritation. May cause skin and respiratory tract irritation. Long term inhalation of particles may cause lung damage. Cancer hazard. Contains crystalline silica which may cause lung cancer.

Canadian Regulations:
UN PIN No.: Not regulated

WHMIS Class: D2A D2B

Physical State: Powder

Odor: Odorless

Color: Tan

Potential Health Effects:

Acute Effects

Eye Contact: May cause severe eye irritation.

Skin Contact: May be irritating to the skin. Long term contact can cause skin dryness.

Inhalation: May be irritating to the respiratory tract .

Ingestion: May cause gastric distress, nausea and vomiting if ingested.

Carcinogenicity & Chronic Effects: See Section 11 – Toxicological Information

Routes of Exposure: Eyes. Dermal (skin) contact. Irritation.

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Target Organs: Eyes, Skin, Respiratory system

Medical Conditions Aggravated by Exposure:

Skin. Respiratory

4. FIRST AID MEASURES

Eye Contact: Promptly wash eyes with lots of water while lifting eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Skin Contact: Wash skin thoroughly with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if any discomfort continues.

Inhalation: Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Dilute with 2 - 3 glasses of water or milk, if conscious. Never give anything by mouth to an unconscious person. If signs of irritation or toxicity occur seek medical attention.

General Notes: Persons seeking medical attention should carry a copy of this MSDS with them.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point: F (C): NA
Flammable Limits in Air - Lower (%): ND
Flammable Limits in Air - Upper (%): ND

Autoignition Temperature: F(C) ND
Flammability Class: NA
Other Flammable Properties: ND

Extinguishing Media: This material is not combustible. Use extinguishing media appropriate for surrounding fire.

Protection Of Fire-Fighters:

Special Fire-Fighting Procedures: Do not enter fire area without proper personal protective equipment, including NIOSH/MSHA approved self-contained breathing apparatus. Evacuate area and fight fire from a safe distance. Water spray may be used to keep fire-exposed containers cool. Keep water run off out of sewers and waterways.

Hazardous Combustion Products: Not determined.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment identified in Section 8.

Spill Procedures: Evacuate surrounding area, if necessary. Wet product may create a slipping hazard. Contain spilled material. Avoid the generation of dust. Sweep, vacuum, or shovel and place into closable container for disposal.

Environmental Precautions: Do not allow to enter sewer or surface and subsurface waters. Waste must be disposed of in accordance with federal, state and local laws.

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7. HANDLING AND STORAGE

Handling: Put on appropriate personal protective equipment. Avoid contact with skin and eyes. Avoid generating or breathing dust. Product is slippery if wet. Use only in a well ventilated area. Wash thoroughly after handling.

Storage: Store in dry, well-ventilated area. Keep container closed. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient	CAS NO:	Wt. %	ACGIH TLV TWA	OSHA PEL TWA	Other	Notes
Sepiolite	63800-37-3	60 - 100	Not Listed	Not Listed		(1)
Silica, crystalline, quartz	14808-60-7	0.1 - 1	0.05 mg/m ³	see Table Z-3	NIOSH: 0.05 mg/m ³ TWA (10H day/40H wk)	(R)
Water soluble polymer		1 - 5	Not Listed	Not Listed		(1)
Sodium carbonate	497-19-8	10 - 30	Not Listed	Not Listed		None

Notes:

(1) Control as an ACGIH particulate not otherwise specified (PNOS): 10 mg/m³ (Inhalable); 3 mg/m³ (Respirable) and an OSHA particulate not otherwise regulated (PNOR): 15 mg/m³ (Total); 5 mg/m³ (Respirable).

(R) Respirable fraction (ACGIH);

Table Z-3: PEL for Mineral Dusts containing crystalline silica are 10 mg/m³ / (%SiO₂+2) for quartz and 1/2 the calculated quartz value for cristobalite and tridymite.

Engineering Controls: Use appropriate engineering controls such as, exhaust ventilation and process enclosure, to ensure air contamination and keep workers exposure below the applicable limits.

Personal Protection Equipment

Eye/Face Protection: Dust resistant safety goggles.

Skin Protection: Wear appropriate clothing to prevent repeated or prolonged skin contact. Chemical resistant gloves recommended for prolonged or repeated contact. Use protective gloves made of: Neoprene. Nitrile.

Respiratory Protection: Use at least a NIOSH-approved N95 half-mask disposable or reusable particulate respirator (dust mask). In work environments containing oil mist/ aerosol, use at least NIOSH-approved P95 half-mask disposable or reusable particulate respirator. For exposure exceeding 10 x PEL use a NIOSH-approved N100 Particulate Respirator.

General Hygiene Considerations: Work clothes should be washed separately at the end of each work day. Disposable clothing should be discarded, if contaminated with product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: Tan
Odor: Odorless
Physical State: Powder
pH: ND
Vapor Pressure: NA
Vapor Density (Air=1): NA
Boiling Point: ND
Melting/Freezing Point: ND
Solubility (Water): Dispersible
Specific Gravity (H₂O = 1): 1.9 - 2.4
Evaporation Rate: NA
Odor Threshold(s): ND

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10. STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to Avoid: ND
Materials to Avoid: ND
Hazardous Decomposition Products: None known
Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

Component Toxicological Data

Ingredient	CAS NO:	Acute Data
Water soluble polymer		> 5,000 mg/kg
Sodium carbonate	497-19-8	Oral LC50: 4090 mg/kg (rat); Inhalation LC50: 2300 mg/m ³ /2H (rat)

Ingredient	Component Toxicological Summary
Silica, crystalline, quartz	<p>Crystalline silica is the most widely occurring of all minerals. The most common form of silica is sand. The International Agency for Research on Cancer (IARC) has designated crystalline silica in the form of quartz or cristobalite a Group 1 (carcinogenic to humans). This designation was based on an increased risk of lung cancer among crystalline silica exposed workers. IARC did note that carcinogenicity of crystalline silica in humans was not detected in all industrial circumstances studied. Further, carcinogenicity of crystalline silica may be dependent on inherent characteristics of the crystalline silica or external factors affecting its biological activity or distribution of polymorphs. (IARC Vol. 68, 1997, p. 41).</p> <p>The National Toxicology Program (NTP) classifies crystalline silica as "reasonably anticipated to cause cancer in humans" (6th Annual Report on Carcinogens, 1991). Long term inhalation of crystalline silica can also result in the lung disease, silicosis. Symptoms of this disease include coughing and shortness of breath. (NJ HSFS, January 1996)</p>

Product Toxicological Information:

Long term inhalation of particulate can cause irritation, inflammation and/or permanent injury to the lungs. Illnesses such as pneumoconiosis ("dusty lung"), pulmonary fibrosis, chronic bronchitis, emphysema and bronchial asthma may develop.

12. ECOLOGICAL INFORMATION

Component Ecotoxicity Data: No data available.

Ingredient	CAS NO:	Data
Water soluble polymer		LC50 96H: 490 mg/l (rainbow trout); LC50 48H: 980 mg/l (Daphnia magna)

Product Ecotoxicity Data: Contact MASI's Environmental Affairs Department for available product ecotoxicity data.

Biodegradation: ND

Bioaccumulation: ND

Octanol/Water Partition Coefficient: ND

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13. DISPOSAL CONSIDERATIONS

Waste Classification: Not determined.

Waste Management: Under U.S. Environmental Protection Agency (EPA) Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user to determine at the time of disposal, whether the product meets RCRA criteria for the hazardous waste. This is because product uses, transformations, mixtures, processes, etc., may render the resulting materials hazardous. Empty containers retain residues. All labeled precautions must be observed.

Disposal Method: Recover and reclaim or recycle, if practical. Should this product become a waste, dispose of in a permitted industrial landfill. Ensure that the containers are empty by the RCRA criteria prior to disposal in a permitted industrial landfill.

14. TRANSPORT INFORMATION

U.S. DOT

Shipping Description: Not regulated

TDG (Canada):

Shipping Description: Not regulated

UN PIN No.: Not regulated

IMDG:

Shipping Description: Not regulated

ICAO/IATA:

Shipping Description: Not regulated

15. REGULATORY INFORMATION

U.S. Federal and State Regulations

SARA 311/312:

SARA 311/312 Hazard Categories: Immediate (acute) health hazard. Delayed (chronic) health hazard.

Ingredient	SARA 313	CERCLA RQ	SARA 302 / TPQs	CA 65	CA 65	CA 65	CA 65
				Cancer	Dev. Tox.	Repro. F	Repro. M
Sepiolite	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Silica, crystalline, quartz	Not Listed	Not Listed	Not Listed	carcinogen (airborne particles of respirable size); initial date 10/1/88	Not Listed	Not Listed	Not Listed
Water soluble polymer	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Sodium carbonate	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

State Comments:

Proposition 65: This product contains chemical(s) considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 to cause cancer and/or reproductive toxicity. See table under U.S. Federal and State Regulations for the specific chemicals.

International Inventories

Ingredient	CAS NO:	TSCA	DSL	NDSL	EINECS	AICS
Sepiolite	63800-37-3	Listed	Listed	Not Listed	Listed	Listed
Silica, crystalline, quartz	14808-60-7	Listed	Listed	Not Listed	Listed	Listed
Water soluble polymer		Listed	Listed	Not Listed	Listed	Listed
Sodium carbonate	497-19-8	Listed	Listed	Not Listed	Listed	Listed

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Inventory Comment:

"Listed" indicates the component is listed or exempt from listing on the chemical inventory.

Canadian Regulations:

Controlled Products Regulations Statement: This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Class:

D2A D2B

16. OTHER INFORMATION

The following sections have been revised: 1

NA – Not Applicable, ND – Not Determined

Disclaimer:

MSDS furnished independent of product sale. While every effort has been made to accurately describe this product, some of the data are obtained from sources beyond our direct supervision. We can not make any assertions as to its reliability or completeness; therefore, user may rely on it only at user's risk. We have made no effort to censor or conceal deleterious aspects of this product. Since we cannot anticipate or control the conditions under which this information and product may be used, we make no guarantee that the precautions we have suggested will be adequate for all individuals and/or situations. It is the obligation of each user of this product to comply with the requirements of all applicable laws regarding use and disposal of this product. Additional information will be furnished upon request to assist the user; however, no warranty, either expressed or implied, nor liability of any nature with respect to this product or to the data herein is made or incurred hereunder.