



MATERIAL SAFETY DATA SHEET

Trade Name: **ActiPac™**

Revision Date: 1/8/07

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: ActiPac™
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 81127
Lafayette, LA 70598-1127
Tel. No. (866) 494-5444
www.masitech.com

Revision Number: 3

HMIS Rating

Health: 2

Flammability: 1

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
Sodium carboxymethoxystarch	9063-38-1	30 – 60	No comments
Hemicellulose	9034-32-6	30 – 60	No comments
Water	7732-18-5	1 – 5	No comments
Sodium carbonate	497-19-8	30 – 60	No comments

3. HAZARDS IDENTIFICATION

Emergency Overview: Warning! May cause severe eye irritation. May cause skin and respiratory tract irritation. Long term inhalation of particulates may cause lung damage.

Canadian Regulations:

UN PIN No.: Not regulated

WHMIS Class: D2B

Physical State: Powder

Odor: Odorless

Color: Tan

Potential Health Effects:

Acute Effects

Eye Contact: May irritate eyes.

Skin Contact: May be irritating to the skin.

Inhalation: May be irritating to the respiratory tract .

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

Carcinogenicity & Chronic Effects: IARC: Not Listed; OSHA: Not regulated; NTP: Not listed

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

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Target Organs/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)** 716F (380C)
- Flammability Class:** NA
- Other Flammable Properties:** Particulate may accumulate static electricity. Dusts at sufficient concentrations can form explosive mixtures with air.
- Extinguishing Media:** 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:** Oxides of: Carbon

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 slipper when wet. Use only with adequate ventilation. 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 CONTROL/PERSONAL PROTECTION

Exposure Limits

Ingredient	CAS NO:	Wt. %	ACGIH TLV TWA	OSHA PEL TWA	Other	Notes
Sodium carboxymethoxystarch	9063-38-1	30 - 60	Not Listed	Not Listed		(1)
Hemicellulose	9034-32-6	30 - 60	Not Listed	Not Listed		None
Water	7732-18-5	1 - 5	Not Listed	Not Listed		None
Sodium carbonate	497-19-8	30 - 60	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).

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: If exposed to particulates/aerosols: Use at least a NIOSH-approved N95 half-mask disposable particulate respirator. In work environments containing oil mist/aerosol use at least a NIOSH-approved P95 half-mask disposable or reusable particulate respirator.
If exposed to organic vapors:
Use a NIOSH/MSHA-approved organic vapor respirator. CCROV: CCR with organic vapor cartridge.

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: ND
Vapor Density (Air=1): ND
Boiling Point: ND
Melting/Freezing Point: ND
Solubility (Water): Soluble
Specific Gravity (H₂O = 1): 1.6 (estimated)
Evaporation Rate: ND
Odor Threshold(s): ND

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10. STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to Avoid: Not determined
Materials to Avoid: Contact with oxidizing agents
Hazardous Decomposition Products: None known
Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

Component Toxicological Data

Ingredient	CAS NO:	Acute Data
Sodium carbonate	497-19-8	Oral LC50: 1090 mg/kg (rat); Inhalation LC50: 2300 mg/m ³ /2H (rat)

Product Toxicological Information: No toxicological data is available for this product.

12. ECOLOGICAL INFORMATION

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

Biodegradation: ND
Bioaccumulation: ND
Octanol/Water Partition Coefficient: ND

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

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15. REGULATORY INFORMATION

U.S. Federal and State Regulations

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

Ingredient	SARA 313	CERCLA RQ	SARA 302 / TPQs	CA 65 Cancer	CA 65 Dev. Tox.	CA 65 Repro. F	CA 65 Repro. M
Sodium carboxymethoxystarch	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Hemicellulose	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Water	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 is not known to contain chemicals considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing cancer and/or reproductive toxicity.

International Inventories

Ingredient	CAS NO:	TSCA	DSL	NDSL	EINECS	AICS
Sodium carboxymethoxystarch	9063-38-1	Listed	Listed	Not Listed	Listed	Listed
Hemicellulose	9034-32-6	Listed	Listed	Listed	Listed	Listed
Water	7732-18-5	Listed	Listed	Not Listed	Listed	Listed
Sodium carbonate	497-19-8	Listed	Listed	Not Listed	Listed	Listed

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: 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.