HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: MA-19 COMPONENT

Revision Date: 02-Jan-2013

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: MA-19 COMPONENT

Synonyms: None
Chemical Family: Chromate
Application: Component

Manufacturer/Supplier Halliburton Energy Services

P.O. Box 1431

Duncan, Oklahoma 73536-0431

Emergency Telephone: (281) 575-5000

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Sodium dichromate		60 - 100%	0.01 mg/m ³	0.05 mg/m ³

3. HAZARDS IDENTIFICATION

Hazard Overview May cause eye, skin, and respiratory irritation. May be harmful if swallowed. Potential

carcinogen. Oxidizer.

4. FIRST AID MEASURES

Inhalation If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably

mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

Skin In case of contact, immediately flush skin with plenty of soap and water for at least 15

minutes. Get medical attention. Remove contaminated clothing and launder before

reuse.

Eyes In case of contact, or suspected contact, immediately flush eyes with plenty of water

for at least 15 minutes and get medical attention immediately after flushing.

Ingestion Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek

medical attention. Never give anything by mouth to an unconscious person.

Notes to Physician Not Applicable

FIRE FIGHTING MEASURES

Flash Point/Range (F): Not Determined Flash Point/Range (C): Not Determined Flash Point Method: Not Determined **Autoignition Temperature (F):** Not Determined **Autoignition Temperature (C):** Not Determined Flammability Limits in Air - Lower (%): Not Determined Flammability Limits in Air - Upper (%): Not Determined

Fire Extinguishing Media All standard firefighting media.

Special Exposure Hazards Oxidizer. May ignite combustibles.

Fire-Fighters

Special Protective Equipment for Full protective clothing and approved self-contained breathing apparatus required for

fire fighting personnel.

Health 2, Flammability 0, Reactivity 1 **NFPA Ratings: HMIS Ratings:** Health 2, Flammability 0, Reactivity 1

ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment.

Environmental Precautionary

Measures

Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning /

Absorption

Scoop up and remove.

HANDLING AND STORAGE

Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust. Wash **Handling Precautions**

hands after use. Launder contaminated clothing before reuse.

Storage Information Keep container closed when not in use.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Use in a well ventilated area. Local exhaust ventilation should be used in areas **Engineering Controls**

without good cross ventilation.

Respiratory Protection Dust/mist respirator. (N95, P2/P3)

Hand Protection Impervious rubber gloves.

Skin Protection Rubber apron.

Eye Protection Dust proof goggles.

Other Precautions Eyewash fountains and safety showers must be easily accessible.

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid Color: Red Odor: Odorless pH: 3.5 Specific Gravity @ 20 C (Water=1): 2.35

9. PHYSICAL AND CHEMICAL PROPERTIES

Density @ 20 C (lbs./gallon): Not Determined

Bulk Density @ 20 C (lbs/ft3): 83.3

Boiling Point/Range (F): Not Determined Not Determined **Boiling Point/Range (C):** Freezing Point/Range (F): Not Determined Freezing Point/Range (C): Not Determined Vapor Pressure @ 20 C (mmHg): Not Determined Vapor Density (Air=1): Not Determined **Percent Volatiles:** Not Determined **Evaporation Rate (Butyl Acetate=1):** Not Determined

Solubility in Water (g/100ml): 73

Solubility in Solvents (g/100ml):

VOCs (lbs./gallon):

Viscosity, Dynamic @ 20 C (centipoise):

Viscosity, Kinematic @ 20 C (centistokes):

Partition Coefficient/n-Octanol/Water:

Not Determined

Not Determined

Molecular Weight (g/mole): 298

10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid None anticipated

Incompatibility (Materials to

Avoid)

Organic matter. All flammables, especially petroleum products, asphalt & other

volatile flammables.

Hazardous Decomposition

Products

None known.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Inhalation Causes severe respiratory irritation.

Skin Contact Causes severe skin irritation with tissue destruction. Prolonged or repeated contact

may cause ulceration of the skin.

Eye Contact May cause severe eye irritation.

Ingestion Irritation of the mouth, throat, and stomach. May cause abdominal pain, vomiting,

nausea, and diarrhea.

Aggravated Medical Conditions Skin disorders.

Chronic Effects/Carcinogenicity Contains hexavalent chromium, a suspected lung carcinogen.

Other Information None known.

Toxicity Tests

Oral Toxicity: LD50: 50 mg/kg (Rat)

Dermal Toxicity: Not determined Inhalation Toxicity: Not determined

MA-19 COMPONENT Page 3 of 6 Primary Irritation Effect: Not determined

Carcinogenicity Not determined

Genotoxicity: Not determined

Reproductive /

Not determined

Developmental Toxicity:

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Not determined

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: Not determined Acute Crustaceans Toxicity: Not determined Acute Algae Toxicity: Not determined

Chemical Fate Information Not determined

Other Information Not applicable

13. DISPOSAL CONSIDERATIONS

Disposal MethodDisposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging This bag may contain residue of a hazardous material. Some authorities may

regulate such containers as hazardous waste. Dispose of container according to

national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

DOT

UN3077,Environmentally Hazardous Substance, Solid, N.O.S.(Contains Sodium Dichromate), 9, III, Marine Pollutant RQ (Sodium Dichromate - 4.5 kg.)
NAERG 171

NALKG II I

Canadian TDG

Environmentally Hazardous Substance, Solid, N.O.S.(Contains Sodium Dichromate), 9, UN3077, III, Marine Pollutant

ADR

UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (Contains Sodium Dichromate), 9, III, Marine Pollutant

Air Transportation

ICAO/IATA

UN3077,Environmentally Hazardous Substance, Solid, N.O.S., 9, III (Contains Sodium Dichromate), Marine Pollutant RQ (Sodium Dichromate - 4.5 kg.)

Sea Transportation

IMDG

UN3077,Environmentally Hazardous Substance, Solid, N.O.S.(Contains Sodium Dichromate), 9, III , Marine Pollutant RQ (Sodium Dichromate - 4.5 kg.) EmS F-A, S-F

Other Transportation Information

Labels: Miscellaneous - Class 9

15. REGULATORY INFORMATION

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

EPA SARA Title III Extremely Hazardous Substances

Not applicable

EPA SARA (311,312) Hazard

Class

Acute Health Hazard Chronic Health Hazard

EPA SARA (313) Chemicals This product contains toxic chemical(s) listed below which is(are) subject to the

reporting requirements of Section 313 of Title III of SARA and 40 CFR Part 372:

Chromium and Compounds//10588-01-9

EPA CERCLA/Superfund Reportable Spill Quantity

EPA Reportable Spill Quantity is 10 Pounds based on Sodium dichromate (CAS:

10588-01-9).

EPA RCRA Hazardous Waste

Classification

If product becomes a waste, it does meet the criteria of a hazardous waste as

defined by the US EPA, because of:

Ignitability D001 Toxicity D007

California Proposition 65 The California Proposition 65 regulations apply to this product.

MA Right-to-Know Law One or more components listed.

NJ Right-to-Know Law

One or more components listed.

PA Right-to-Know Law One or more components listed.

Canadian Regulations

Canadian DSL Inventory All components listed on inventory or are exempt.

WHMIS Hazard Class D2A Very Toxic Materials

C Oxidizing Materials

16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS

Not applicable

Additional Information For additional inform

For additional information on the use of this product, contact your local Halliburton

representative.

For questions about the Material Safety Data Sheet for this or other Halliburton

products, contact Chemical Compliance at 1-580-251-4335.

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or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of

the user.

END OF MSDS