HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: MSA INHIBITOR

Revision Date: 20-Dec-2012

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

COMPANY/UNDERTAKING

Statement of Hazardous Nature Hazardous according to the criteria of NOHSC, Dangerous Goods according to the

criteria of ADG.

Manufacturer/Supplier Halliburton Australia Pty. Ltd.

15 Marriott Road

Jandakot WA 6164 Australia

ACN Number: 009 000 775

Telephone Number: 61 (08) 9455 8300 Fax Number: 61 (08) 9455 5300

Product Emergency Telephone

Australia: 08-64244950

Papua New Guinea: 05 1 281 575 5000

NewZealand: 06-7559274

Fire, Police & Ambulance - Emergency Telephone

Australia: 000

Papua New Guinea: 000 New Zealand: 111

Identification of Substances or Preparation

Product Trade Name: MSA INHIBITOR

Synonyms: None
Chemical Family: Blend
UN Number: , UN3264

Dangerous Goods Class:8Subsidiary Risk:NoneHazchem Code:2XPoisons Schedule:S6Application:Inhibitor

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	Australia NOHSC	New Zealand WES	ACGIH TLV-TWA
Sulfuric acid	7664-93-9	1-2	TWA: 1 mg/m ³ STEL: 3 mg/m ³	TWA: 1 mg/m ³	TWA: 0.2 mg/m ³

2. COMPOSITION/INFORMATION ON INGREDIENTS								
Hydrochloric acid	7647-01-0	5 - 10%	5 ppm	Not applicable	2 ppm			
Nonylphenol ethoxylate	Proprietary	10 - 30%	Not applicable	Not applicable	Not applicable			

Non-Hazardous Substance to Total of 100%

HAZARDS IDENTIFICATION

Hazard Overview May cause eye and skin burns. May cause headache, dizziness, and other central

nervous system effects. May be harmful if swallowed. May effect the blood's ability to

carry oxygen. May cause damage to internal organs.

R22 Harmful if swallowed. **Risk Phrases**

> R34 Causes burns. R45 May cause cancer.

HSNO Classification Not Determined

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. Destroy or properly dispose of contaminated shoes.

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.

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

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

Notes to Physician Not Applicable

FIRE FIGHTING MEASURES

Water fog, carbon dioxide, foam, dry chemical. Suitable Extinguishing Media

Extinguishing media which must None known.

not be used for safety reasons

Decomposition in fire may produce toxic gases. Reaction with steel and certain other **Special Exposure Hazards**

metals generates flammable hydrogen gas.

Fire-Fighters

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

fire fighting personnel.

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

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials.

Neutralize to pH of 6-8. Scoop up and remove.

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7. HANDLING AND STORAGE

Handling Precautions Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after

use. Launder contaminated clothing before reuse.

Storage Information Store away from alkalis. Store in a cool well ventilated area. Keep container closed

when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering ControlsUse in a well ventilated area. Local exhaust ventilation should be used in areas

without good cross ventilation.

Respiratory Protection Organic vapor/acid gas respirator with a dust/mist filter.

Hand Protection Use Viton or 4H gloves.

Skin Protection Full protective chemical resistant clothing.

Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Color: Dark brown
Odor: Coaltar

pH: Not Determined

Specific Gravity @ 20 C (Water=1): 1.18

Density @ 20 C (kg/l): 1.178

Bulk Density @ 20 C (kg/m³):Not DeterminedBoiling Point/Range (C):Not DeterminedFreezing Point/Range (C):Not DeterminedPour Point/Range (C):Not Determined

Flash Point/Range (C): Not DeterminedMin: > 98

Flash Point Method: Not Determined **Autoignition Temperature (C):** Not Determined Flammability Limits in Air - Lower (g/m³): Not Determined Flammability Limits in Air - Lower (%): Not Determined Flammability Limits in Air - Upper (g/m³): Not Determined Flammability Limits in Air - Upper (%): 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): 12

Solubility in Solvents (g/100ml):

VOCs (g/l):

Viscosity, Dynamic @ 20 C (centipoise):

Viscosity, Kinematic @ 20 C (centistokes):

Partition Coefficient/n-Octanol/Water:

Molecular Weight (g/mole):

Decomposition Temperature (C):

Not Determined

Not Determined

Not Determined

10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

MSA INHIBITOR Page 3 of 6 Conditions to Avoid None anticipated

Incompatibility (Materials to

Avoid)

Strong alkalis. Strong oxidizers.

Hazardous Decomposition

Products

Silicon dioxide. Ammonia. Oxides of nitrogen. Carbon monoxide and carbon dioxide.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Sympotoms related to exposure

Inhalation

Causes severe respiratory irritation. Excessive inhalation causes headache,

dizziness, nausea and incoordination. May cause liver damage. May cause kidney

damage.

Skin Contact Causes severe burns.

Eye Contact May cause eye burns.

Ingestion Causes burns of the mouth, throat and stomach. May cause headache, dizziness,

nausea, vomiting, gastrointestinal irritation and central nervous system depression. May cause liver and kidney damage. May reduce blood's ability to transport oxygen.

Aggravated Medical Conditions Skin disorders. Lung disorders. Liver disorders.

Chronic Effects/Carcinogenicity Prolonged or repeated exposure may cause central nervous system and brain

effects. Prolonged or repeated exposure may cause liver, kidney and blood effects. Prolonged or repeated exposure may cause lung damage. This product contains a

potential carcinogen.

Other Information None known.

Toxicity Tests

Oral Toxicity: Not determined

Dermal Toxicity: Not determined

Inhalation Toxicity: Not determined

Primary Irritation Effect: Not determined

Carcinogenicity Not determined

Genotoxicity: Not determined

Reproductive /

Developmental Toxicity:

Not determined

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Slowly biodegradable

Bio-accumulation Not determined

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Ecotoxicological Information

Acute Fish Toxicity: Not determined

Acute Crustaceans Toxicity: TLM96: 3300 ppm (Crangon crangon)

Acute Algae Toxicity: Not determined

Chemical Fate Information Not determined Other Information Not applicable

13. **DISPOSAL CONSIDERATIONS**

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

Contaminated Packaging Follow all applicable national or local regulations.

TRANSPORT INFORMATION

Land Transportation

ADR

UN3264, Corrosive Liquid, Acidic, Inorganic, N.O.S. (Contains Hydrochloric Acid, Sulfuric Acid), 8, III

Air Transportation

ICAO/IATA

UN3264, Corrosive Liquid, Acidic, Inorganic, N.O.S., 8, III (Contains Hydrochloric Acid, Sulfuric Acid)

Sea Transportation

IMDG

UN3264, Corrosive Liquid, Acidic, Inorganic, N.O.S. (Contains Hydrochloric Acid, Sulfuric Acid), 8, III EmS F-A, S-B

Other Transportation Information

Labels: Corrosive

REGULATORY INFORMATION

Chemical Inventories

Australian AICS Inventory New Zealand Inventory of

Chemicals

US TSCA Inventory EINECS Inventory

All components listed on inventory or are exempt.

This product does not comply with NZIOC

All components listed on inventory or are exempt.

This product, and all its components, complies with EINECS

Classification Т - Toxic.

C Corrosive. Risk Phrases R22 Harmful if swallowed.

R34 Causes burns. R45 May cause cancer.

Safety Phrases S2 Keep out of reach of children.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S30 Never add water to this product.

S45 In case of accident or if you feel unwell, seek medical advice immediately.

S53 Avoid exposure - obtain special instructions before use.

16. OTHER INFORMATION

The following sections have been revised since the last issue of this SDS Not applicable

Contact

Australian Poisons Information Centre

24 Hour Service: - 13 11 26

Police or Fire Brigade: - 000 (exchange): - 1100

New Zealand National Poisons Centre

0800 764 766

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

representative.

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

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

Disclaimer Statement This information is furnished without warranty, expressed or implied, as to accuracy

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