

MATERIAL SAFETY DATA SHEET

Product Trade Name: MSA II INHIBITOR

Revision Date: 03-Jan-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 II INHIBITOR
Synonyms: None
Chemical Family: Blend
UN Number: , UN1993
Dangerous Goods Class: 3
Subsidiary Risk: None
Hazchem Code: 3[Y]
Poisons Schedule: S6
Application: Corrosion 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
Thiourea	62-56-6	10-30	Not applicable	Not applicable	Not applicable

2. COMPOSITION/INFORMATION ON INGREDIENTS

Acetone	67-64-1	1-5	TWA: 500 ppm TWA: 1185 mg/m ³ STEL: 1000 ppm STEL: 2375 mg/m ³	STEL: 1000 ppm STEL: 2375 mg/m ³ TWA: 500 ppm TWA: 1185 mg/m ³	TWA: 500 ppm STEL: 750 ppm
Ethylene glycol	107-21-1	10-30	TWA: 10 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³	Not applicable	100 mg/m ³

Non-Hazardous Substance to Total of 100%

3. HAZARDS IDENTIFICATION

Hazard Overview May cause eye, skin, and respiratory irritation. May cause headache, dizziness, and other central nervous system effects. May be harmful if swallowed. May cause birth defects. Potential carcinogen. Combustible. May cause allergic skin reaction.

Risk Phrases
R22 Harmful if swallowed.
R36 Irritating to eyes.
R45 May cause cancer.
R63 Possible risk of harm to the unborn child.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

HSNO Classification Not Determined

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 Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration.

Notes to Physician Not Applicable

5. FIRE FIGHTING MEASURES

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

Extinguishing media which must not be used for safety reasons None known.

Special Exposure Hazards Decomposition in fire may produce toxic gases. Use water spray to cool fire exposed surfaces. Vapors are heavier than air and may accumulate in low areas. Vapors may travel along the ground to be ignited at distant locations. Do not allow runoff to enter waterways.

Special Protective Equipment for Fire-Fighters Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. 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 Remove ignition sources and work with non-sparking tools. Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

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. Ground and bond containers when transferring from one container to another.

Storage Information Store away from oxidizers. Store in a cool well ventilated area. Keep container closed when not in use. Keep from heat, sparks, and open flames.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

Respiratory Protection Not normally needed. But if significant exposures are possible then the following respirator is recommended:
Organic vapor respirator.
In high concentrations, supplied air respirator or a self-contained breathing apparatus.

Hand Protection Neoprene gloves. Nitrile gloves. Use Viton or 4H gloves.

Skin Protection Rubber apron. Rubber boots.

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:	Pungent
pH:	Not Determined
Specific Gravity @ 20 C (Water=1):	1.09
Density @ 20 C (kg/l):	1.088
Bulk Density @ 20 C (kg/m³):	Not Determined
Boiling Point/Range (C):	100
Freezing Point/Range (C):	-29
Pour Point/Range (C):	Not Determined
Flash Point/Range (C):	48
Flash Point Method:	SFCC
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

9. PHYSICAL AND CHEMICAL PROPERTIES

Flammability Limits in Air - Upper (%):	Not Determined
Vapor Pressure @ 20 C (mmHg):	16.4
Vapor Density (Air=1):	>1
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Disperses
Solubility in Solvents (g/100ml):	Not Determined
VOCs (g/l):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined
Decomposition Temperature (C):	Not Determined

10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None anticipated
Incompatibility (Materials to Avoid)	Strong oxidizers.
Hazardous Decomposition Products	Oxides of nitrogen. Oxides of sulfur. Carbon monoxide and carbon dioxide. Hydrogen chloride.
Additional Guidelines	Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
<u>Symptoms related to exposure</u>	
Inhalation	May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness. May cause respiratory irritation.
Skin Contact	May cause moderate skin irritation. May cause an allergic skin reaction.
Eye Contact	May cause severe eye irritation. May cause permanent eye damage.
Ingestion	Harmful if swallowed. May cause stomach discomfort. May cause kidney damage. May affect the blood and blood system. May cause thyroid damage.
Aggravated Medical Conditions	Skin disorders. Eye ailments. Liver disorders. Blood disorders. Central nervous system disorders. Respiratory disorders. Thyroid disorders.
Chronic Effects/Carcinogenicity	Prolonged or repeated exposure may cause kidney damage. Prolonged or repeated exposure may cause reproductive system damage. Prolonged or repeated exposure may cause liver, heart, blood and brain damage. Contains thiourea, a suspected carcinogen of the liver and thyroid. Chronically high exposures cause bone marrow depression with anemia, leukopenia and thrombocytopenia. Prolonged or repeated exposure may cause embryo and fetus toxicity.
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	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 Method	Disposal should be made in accordance with federal, state, and local regulations.
Contaminated Packaging	Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

ADR

UN1993, Flammable Liquid, N.O.S. (Contains Acetone), 3, III

Air Transportation

ICAO/IATA

UN1993, Flammable Liquid, N.O.S., 3, III
(Contains Acetone)RQ (Thiourea - 4.5 kg.)

Sea Transportation

IMDG

UN1993, Flammable Liquid, N.O.S. (Contains Acetone), 3, III, (48.9 C)RQ (Thiourea - 4.5 kg.)

Other Transportation Information

Labels: Flammable Liquid

15. REGULATORY INFORMATION

Chemical Inventories

Australian AICS Inventory Product contains one or more components not listed on inventory.
New Zealand Inventory of Chemicals This product does not comply with NZIOC
US TSCA Inventory All components listed on inventory or are exempt.
EINECS Inventory This product does not comply with EINECS

Classification

T - Toxic.
Xi - Irritant.
N - Dangerous For The Environment.

Risk Phrases

R22 Harmful if swallowed.
R36 Irritating to eyes.
R45 May cause cancer.
R63 Possible risk of harm to the unborn child.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases

S2 Keep out of reach of children.
S9 Keep container in a well ventilated place.
S16 Keep away from sources of ignition - No Smoking.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.
S36/37 Wear suitable protective clothing and gloves.

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

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*****END OF MSDS*****