

MATERIAL SAFETY DATA SHEET

Product Trade Name: HII-124F INTENSIFIER

Revision Date: 26-Mar-2013

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: HII-124F INTENSIFIER

Synonyms: None

Chemical Family: Organic acid

UN Number: , UN1779

Dangerous Goods Class: 8

Subsidiary Risk: None

Hazchem Code: 2R

Poisons Schedule: None Allocated

Application: Intensifier

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
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Formic acid	64-18-6	60 - 100%	TWA: 5 ppm TWA: 9.4 mg/m ³ STEL: 10 ppm STEL: 19 mg/m ³	STEL: 10 ppm STEL: 19 mg/m ³ TWA: 5 ppm TWA: 9.4 mg/m ³	TWA: 5 ppm STEL: 10 ppm
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Non-Hazardous Substance to Total of 100%

3. HAZARDS IDENTIFICATION

Hazard Overview	May cause eye, skin, and respiratory burns. May be harmful if swallowed. Flammable.
Risk Phrases	R35 Causes severe burns.
HSNO Classification	3.1C Flammable Liquids - Medium hazard 6.1C Acutely Toxic Substances 6.1D Acutely Toxic Substances 8.1A Corrosive to metals 8.2B Corrosive to dermal tissue if exposed for greater than 3 mins. 8.3A Corrosive to ocular tissue 9.1D Slightly harmful in the aquatic environment 9.3C Harmful to terrestrial vertebrates

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

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. 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**

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.

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 away from oxidizers. Keep container closed when not in use. Product has a shelf life of 12 months.

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

Acid gas respirator.

Hand Protection

Impervious rubber gloves. Neoprene gloves. Polyvinylchloride 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:	Clear colorless
Odor:	Sharp
pH:	1
Specific Gravity @ 20 C (Water=1):	1.2
Density @ 20 C (kg/l):	1.2
Bulk Density @ 20 C (kg/m ³):	Not Determined
Boiling Point/Range (C):	101
Freezing Point/Range (C):	10
Pour Point/Range (C):	Not Determined
Flash Point/Range (C):	49
Flash Point Method:	Not Determined
Autoignition Temperature (C):	601
Flammability Limits in Air - Lower (g/m ³):	Not Determined
Flammability Limits in Air - Lower (%):	18
Flammability Limits in Air - Upper (g/m ³):	Not Determined
Flammability Limits in Air - Upper (%):	57
Vapor Pressure @ 20 C (mmHg):	23
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	100
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Miscible
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):	46.03
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 alkalis. Strong oxidizers.
Hazardous Decomposition Products	Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
<u>Symptoms related to exposure</u>	
Inhalation	Causes severe respiratory irritation. Causes severe respiratory burns.
Skin Contact	Causes severe burns.
Eye Contact	Causes severe eye burns.
Ingestion	Causes burns of the mouth, throat and stomach.
Aggravated Medical Conditions	Skin disorders.
Chronic Effects/Carcinogenicity	Prolonged, excessive exposure may cause erosion of the teeth.
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	Readily biodegradable
Bio-accumulation	Not determined

Ecotoxicological Information

Acute Fish Toxicity:	96 Hr EC50 <i>Desmodesmus subspicatus</i> : 25 mg/L 72 Hr EC50 <i>Desmodesmus subspicatus</i> : 26.9 mg/L
Acute Crustaceans Toxicity:	48 Hr EC50 <i>Daphnia magna</i> : 138 - 165.6 mg/L [Static] 48 Hr EC50 <i>Daphnia magna</i> : 120 mg/L
Acute Algae Toxicity:	96 Hr EC50 <i>Desmodesmus subspicatus</i> : 25 mg/L 72 Hr EC50 <i>Desmodesmus subspicatus</i> : 26.9 mg/L

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

UN1779, Formic Acid, 8, (3), II

Air Transportation

ICAO/IATA

UN1779, Formic Acid, 8, (3), II

Sea Transportation

IMDG

UN1779, Formic Acid, 8, (3), II
EmS F-A, S-B

Other Transportation Information

Labels: Corrosive
Flammable Liquid

15. REGULATORY INFORMATION

Chemical Inventories

Australian AICS Inventory	All components listed on inventory or are exempt.
New Zealand Inventory of Chemicals	All components listed on inventory or are exempt.
US TSCA Inventory	All components listed on inventory or are exempt.
EINECS Inventory	This product, and all its components, complies with EINECS

Classification C - Corrosive.

Risk Phrases

R35 Causes severe burns.

Safety Phrases

S2 Keep out of reach of children.

S23 Do not breathe gas, fumes, vapour or spray.

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

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

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*****