

MATERIAL SAFETY DATA SHEET

(USA)

(Complies with USA OSHA 29 CFR 1910.1200 and ANSI Z 400.1)

Version: 4

Revision date: 03 March 2010

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product code: F108
Product name: EZEFL0 F108 Surfactant
Company identification: Schlumberger Technology Corporation
110 Schlumberger Drive
Sugar Land, Texas 77478, USA
Telephone: 1-281-285-7873
Emergency telephone number: USA: +1-281-595-3518 (24hr)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING

Main physical hazards: No classified physical hazards.
Main health hazards: Causes eye irritation. May cause skin irritation.
Main environmental hazards: Toxic to algae.
Other Information: Contaminated surfaces will be extremely slippery.
Precautions: Avoid contact with eyes. Do not get on skin or clothing. Wash thoroughly after handling.
HMIS classification: Health: 2 Flammability: 1 Physical hazard: 0

Form: Liquid **Color:** Colorless **Odor:** Amine-like
Principle routes of exposure:
Skin contact. Eye contact.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %- Range
Amine derivative	Proprietary	10 - 30

4. FIRST AID MEASURES

Eye contact: Immediately flush eyes with water for 30 minutes while holding eyelids open.
Skin contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Seek medical attention if irritation occurs.
Ingestion: Seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation: Move to fresh air. Consult a physician if necessary.

5. FIRE-FIGHTING MEASURES

Fire hazard: Negligible.
Flash point: Does not flash.
Autoignition temperature: No data available.
Flammability limits in air:
Lower: Not applicable
Upper: Not applicable
Oxidizing properties: None.

Suitable extinguishing media:

Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Extinguishing media which must not be used for safety reasons:

None known.

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases:

When heated strongly or burned, oxides of carbon and harmful organic chemical fumes are released.

Other information:

Solutions extremely slippery when spilled.

Special protective equipment for firefighters:

Wear protective fire fighting clothing and avoid breathing vapors. Use self-contained breathing apparatus in closed areas.

NFPA rating:

Health:	2
Flammability:	1
Instability:	0
Special:	None

6. ACCIDENTAL RELEASE MEASURES

Main physical hazards: No classified physical hazards.
Other Information: Contaminated surfaces will be extremely slippery.
Personal precautions: Avoid contact with eyes. Do not get on skin or clothing. Wash thoroughly after handling. Wear suitable protective equipment.
Methods for cleaning up: Dam up. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.
Environmental precautions: Keep out of waterways.

7. HANDLING AND STORAGE**Handling:**

Precautions: Avoid contact with eyes. Do not get on skin or clothing. Wash thoroughly after handling.

Safe handling advice: Wear suitable protective equipment.

Technical measures/
storage conditions: Store in well ventilated area out of direct sunlight.

Packaging requirements: High density polyethylene (HDPE) drum or can.

Incompatible products: Oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:	Control the source.
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wear suitable protective equipment.
Respiratory protection:	None normally needed.
Eye protection:	Tightly fitting safety goggles.
Hand protection:	Impervious gloves. PVC. Neoprene.
Skin and body protection:	Chemical resistant apron.

Occupational Exposure Limits

Component	ACGIH - TLVs			OSHA - PELs		
	TWA / Ceiling	STEL	ACGIH - Skin	TWA / C	STEL	Final PELs - Skin
Amine derivative	-	-	-	-	-	-

Particles Not Otherwise Regulated/Specified [PNOR or PNOS] (insoluble or poorly soluble):

- OSHA PEL's for Inert or Nuisance Dust are covered by PNOR limits: respirable fraction: 5 mg/m³; total dust 15 mg/m³.

ACGIH PNOS Recommendations: airborne concentrations should be kept below 3 mg/m³, respirable particulate, and 10 mg/m³, inhalable particles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical characterization:	Surfactant. Aqueous dispersion of organic compounds.
Fire hazard:	Negligible.
Form:	Liquid
Color:	Colorless
Odor:	Amine-like
Odor threshold:	No information available.
pH:	6.5 - 8.0
Boiling point/range:	~100°C / 212 °F
Flash point:	Does not flash.
Flammability limits in air:	
Lower:	Not applicable
Upper:	Not applicable
Bulk density:	Not applicable.
Melting point/range:	(1.7-3.3) °C / (35-38) °F
Decomposition temperature:	No data available.
Solubility:	
Water solubility:	Soluble.
Fat solubility:	No information available.
Partition coefficient (n-octanol/water):	<0
Relative density:	1.0
Vapor pressure:	Similar to water.
Vapor density:	Similar to water.
Viscosity:	Approximately 5 mPa.s
Evaporation rate:	Similar to water.
% Volatile (VOC):	None.

10. STABILITY AND REACTIVITY**Stability:**

Stable under recommended storage conditions.

Conditions to avoid:

None reasonably foreseeable.

Incompatibility with other substances:

Oxidizers.

Hazardous decomposition products:

Carbon oxides. Nitrogen Oxides (NOx).

Hazardous polymerization:

Hazardous polymerization does not occur.

Other Information:

Contaminated surfaces will be extremely slippery.

11. TOXICOLOGICAL INFORMATION**PRODUCT TOXICOLOGICAL INFORMATION**

Information given is based on data on the components and the toxicology of similar products.

Acute Health Hazard

Eye contact:	Severe eye irritation. Causes pain and redness. Prolonged or repeated contact may cause mild burn.
Skin contact:	Irritant; may cause pain, redness, dermatitis.
Ingestion:	Swallowing large amounts may be harmful.
Inhalation:	This is an unlikely route of exposure.
Sensitization - lung:	Not known to cause allergic reaction.
Sensitization - skin:	Not known to cause allergic reaction.

Chronic Health Hazard

Carcinogenic effects:	Not known to cause cancer in humans.
Mutagenic effects:	Not known to cause heritable genetic damage.
Teratogenic effects:	Not known to cause birth defects or have a deleterious effect on a developing fetus.
Reproductive toxicity:	Not known to adversely affect reproductive functions and organs.
Target organ effects:	See COMPONENT TOXICOLOGICAL INFORMATION below.

COMPONENT TOXICOLOGICAL INFORMATION

Component	Target Organ Effects	LD50 / LC50
Amine derivative	-	-

Component	IARC Group 1 or 2:	ACGIH - Carcinogens:	OSHA Listed Carcinogens	NTP:
Amine derivative	-	-	-	-

Component	OTHER TOXICOLOGICAL INFORMATION
Amine derivative	Risk of serious damage to eyes. Causes eye irritation.

12. ECOLOGICAL INFORMATION

PRODUCT INFORMATION

Main environmental hazards: Toxic to algae.

COMPONENT INFORMATION

Amine derivative

Bioaccumulation: log Pow = < 0
Persistence / degradability: Readily biodegradable.
Algae toxicity: 72h EC50= 0.22 mg/l (Skeletonema costatum)

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Dispose of in accordance with local regulations.

Contaminated packaging:

Dispose of in accordance with local regulations. If reusable containers are used, send them back to the product supplier, after the required rinsing.

EPA RCRA Hazardous Waste Code:

None

14. TRANSPORT INFORMATION

DOT:

CERCLA RQ: None
Hazard class: Not regulated.
Proper shipping name: Not regulated
Label(s): None required.

IMDG/IMO

Shipping name: Not regulated.
UN number: None

ICAO/IATA

Shipping name: Not regulated.
UN number: None

TDG (Canada):

Shipping name: Not regulated.
PIN: None

Note 1:

For the applicable placard selection refer to the appropriate transport regulations; the selection may vary depending on the cargo size and categories of other hazardous materials in the cargo.

15. REGULATORY INFORMATION**International Chemical Inventories**

USA, Toxic Substances Control Act inventory (TSCA): This product complies with TSCA requirements.

IMPORTS, USA: No import volume restrictions.

Canada, Domestic Substance List (DSL): This product complies with DSL requirements.

IMPORTS, Canada: No import volume restrictions.

U.S.A. Regulations

OSHA Hazard Communication Standard:
(Complies with USA OSHA 29 CFR 1910.1200 and ANSI Z 400.1)

EPA RCRA Hazardous Waste Code:
None

EPA, Sections 311 and 312 - Material Safety Data Sheet Requirements (40 CFR 370):

Immediate (Acute) Health Hazard:	YES
Delayed (Chronic) Health Hazard:	None
Fire Hazard:	None
Sudden Release or Pressure Hazard:	None
Reactive Hazard:	None

EPA, Sections 313 - List of Toxic Chemicals (40 CFR 372):

This product contains the following substance(s), which appear(s) on the List of Toxic Chemicals:

Additional Regulatory Information

Amine derivative

EPA, CERCLA Section 102a/103 Hazardous Substances (40 CFR 302.4): None

CERCLA/SARA - Hazardous Substances and their RQs: None

EPA, SARA TITLE III Section 304, Extremely Hazardous Substances (40 CFR 355.40): None

California Proposition 65: None

International Hazard Class

WHMIS Hazard Class:
D2B (Other Toxic Effects - Toxic Material)

16. OTHER INFORMATION**Current references:**

1. Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices. *American Conference of Governmental Industrial Hygienists, Cincinnati OH.*
2. IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man. *World Health Organization, International Agency for Research on Cancer. Geneva, Switzerland.*
3. Annual Report on Carcinogens. National Toxicology Program. *U.S. Department of Health and Human Services, Public Health Service.*
4. NIOSH Registry of Toxic Effects of Chemical Substances (RTECS). *National Institute for Occupational Safety and Health. Cincinnati, OH.*
5. LOLI Database.

Explanation of terms:

ACGIH:	American Conference of Governmental Industrial Hygienist
ACGIH-TL:	Threshold Limit Value
DSL:	Domestic Substance List
HMIRC:	Hazardous Materials Information Review Commission
IARC:	International Agency for Research on Cancer
NTP:	National Toxicology Program
NIOSH:	National Institute of Occupational Safety & Health
NIOSH-REL:	Recommended Exposure Limit
OSHA:	Occupational Safety & Health Administration
OSHA-PEL:	Permissible Exposure Limit
TSCA:	Toxic Substance Control Act (Inventory)

Occupational Exposure Limits indicators: TWA - Time Weighted Average; STEL - Short Term Limit; C - Ceiling Limit; units: [mg/m³]

ACGIH Notations:

"Skin" refers to the potential significant contribution to the overall exposure by the cutaneous route, including mucous membranes and the eyes, either by contact with vapors or by direct skin contact with the substance.

"A" notation indicates carcinogenicity as follows:

ACGIH classification: A1 - Confirmed Human Carcinogen; A2 - Suspected Human Carcinogen; A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans; A4 - Not Classifiable as a Human Carcinogen; A5 - Not suspected as a Human Carcinogen.

"SEN" refers to the potential for an agent to product sensitization as confirmed by human and animal data.

Section(s) revised: 9

Prepared by: Chemical Regulatory Compliance (CRC)

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End of the Material Safety Data Sheet