SDS no. 140216 **Version** 2

Revision date 16/Jun/2015 Supersedes date 05/May/2015



Safety Data Sheet EMI-2718

1. Identification

1.1 Product identifier

Product name EMI-2718

Product code 140216

This product may not be distributed or used in Canada.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Drilling fluid additive. Viscosifier.

Uses advised against Consumer use

1.3 Details of the supplier of the safety data sheet

Supplier

M-I L.L.C.

P.O.Box 42842 Houston, TX 77242 www.miswaco.slb.com Telephone: 1 281-561-1511

Prepared by

Global Regulatory Compliance - Chemicals (GRC - Chemicals) , Bethicia Prasek

1.4 Emergency Telephone Number

Emergency telephone (24 Hour) Australia +61 2801 44558, Asia Pacific +65 3158 1074, China +86 10 5100 3039, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, New Zealand +64 9929 1483, USA 001 281 561 1600

2. Hazards identification

2.1 Classification of the substance or mixture

GHS - Classification

Health hazards

Serious eye damage/eye irritation Category 2A

Environmental hazards Not classified

Physical Hazards Not classified

2.2 Label elements





Precautionary statements

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

Unknown acute toxicity 35% of the mixture consists of ingredient(s) of unknown toxicity.

3. Composition/information on Ingredients

3.1 Substances

Not Applicable

3.2 Mixtures

Component	CAS-No	Weight % - range
Alkyl ether sulfate ethoxylated, sodium salt	219756-63-5	1 - 5

Comments

The product contains other ingredients which do not contribute to the overall classification. The exact percentage (concentration) of composition has been withheld as a trade secret

4. First aid measures

4.1 First-Aid Measures

Inhalation Not expected to be a respiratory hazard because of state or low volatility.

Ingestion Rinse mouth. Do not induce vomiting without medical advice. Get medical attention if

symptoms occur.

Skin contact Not expected to be a hazard under anticipated use conditions.

Eye contact Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses. Get

medical attention if any discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed



SDS no. 140216 Revision date 16/Jun/2015

Main symptoms

Inhalation Please see Section 11. Toxicological Information for further information.

Ingestion Please see Section 11. Toxicological Information for further information.

Skin contact Please see Section 11. Toxicological Information for further information.

Eye contact Please see Section 11. Toxicological Information for further information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing media appropriate for surrounding material.

Extinguishing media which shall not be used for safety reasons

None known.

5.2 Special hazards arising from the substance or mixture

Unusual fire and explosion hazards

None known.

Hazardous combustion products

Carbon oxides (COx).

5.3 Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

Special Fire-Fighting Procedures

Containers close to fire should be removed immediately or cooled with water.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment identified in Section 8. Evacuate and ventilate the area. Prevent further leakage or spillage if safe to do so.

6.2 Environmental precautions

The product should not be allowed to enter drains, water courses or the soil.

Environmental exposure controls

Avoid release to the environment.

6.3 Methods and materials for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.



SDS no. 140216 Revision date 16/Jun/2015

Methods for cleaning up

Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. After cleaning, flush away traces with water.

6.4 Reference to other sections

See section 13 for more information.

7. Handling and storage

7.1 Precautions for safe handling

Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Do not breathe vapors or spray mist. Avoid spills and splashing during use.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/precautions Ensure adequate ventilation. Keep airborne concentrations below exposure limits.

Storage precautions Keep containers tightly closed in a dry, cool and well-ventilated place. Follow safe

warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking. Do

not freeze

8. Exposure controls/personal protection

8.1 Control parameters

Not Applicable

	Component	ACGIH TLV	OSHA PEL
ı	Alkyl ether sulfate ethoxylated, sodium salt	Not Determined	Not Determined

8.2 Exposure controls

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created and as such further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.

Engineering measures to reduce exposure

Ensure adequate ventilation.

Personal protective equipment

Eye protection Tightly fitting safety goggles.

Hand protection Wear chemical resistant gloves such as nitrile or neoprene.





ventilation wear suitable respiratory equipment, All respiratory protection equipment should

be used within a comprehensive respiratory protection program that meets the

requirements of 29 CFR 1910.134 (U.S. OSHA Respiratory Protection Standard) or local

equivalent.

If exposed to airborne mist/aerosol of this product, use at least a NIOSH-approved N95 half-mask disposable or re-usable particulate respirator. In work environments containing oil mist/aerosol, use at least a NIOSH-approved P95 half-mask disposable or reuseable particulate respirator. If exposed to vapors from this product use a NIOSH/MSHA-approved

PMCC

respirator with an Organic Vapor cartridge.

Skin and body protection Wear suitable protective clothing, Provide eyewash station.

Hygiene measures Wash hands before eating, drinking or smoking, Remove and wash contaminated clothing

before re-use.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical stateLiquidAppearanceOpaqueColorWhiteOdorOdorlessOdor thresholdNot applicable

<u>Property</u> <u>Values</u> <u>Remarks</u>

pH 7 - 8

pH @ dilution

Melting/freezing point

Boiling point/range

No information available
No information available
100 °C / 212 °F

Flash point $> 93.3 \,^{\circ}\text{C} / > 200 \,^{\circ}\text{F}$

Evaporation rate (BuAc =1) No information available

Flammability (solid, gas) Not Applicable

Flammability Limits in Air

Upper flammability limit
Lower flammability limitNo information available
No information available
No information availableVapor pressureNo information availableVapor densityNo information available

Specific gravity 1.00 - 1.02

Bulk density No information available Water solubility Miscible with water. Solubility in other solvents No information available **Autoignition temperature** No information available No information available **Decomposition temperature** Kinematic viscosity No information available **Dvnamic viscosity** No information available Log Pow No information available

Explosive propertiesNo information available
Oxidizing properties
No information available

9.2 Other information

Pour point

Molecular weight

VOC content(%)

Density

No information available
No information available
No information available
No information available





10. Stability and reactivity

10.1 Reactivity

No specific reactivity hazards associated with this product.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of Hazardous Reactions

Hazardous polymerization

Hazardous polymerization does not occur.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon oxides (COx).

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Inhalation Inhalation of vapors in high concentration may cause irritation of respiratory system.

Eye contact Causes serious eye irritation.

Skin contact Prolonged contact may cause redness and irritation.

Ingestion Ingestion may cause stomach discomfort.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Alkyl ether sulfate ethoxylated, sodium salt	No data available	No data available	No data available

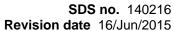
Component	IARC Group 1 or 2	ACGIH - Carcinogens	OSHA listed carcinogens	NTP
Alkyl ether sulfate ethoxylated, sodium salt	No data available	No data available	No data available	No data available

Sensitization This product does not contain any components suspected to be sensitizing.

Mutagenic effects No evidence of mutagenic properties.

Carcinogenicity No evidence of carcinogenic properties.

Reproductive toxicityNo evidence of toxicity to reproduction.





Developmental toxicityNot known to cause birth defects or have a deleterious effect on a developing fetus.

Routes of exposure Eye contact. Skin contact. Inhalation.

Routes of entry No route of entry noted.

Specific target organ toxicity

(single exposure)

Not classified

Specific target organ toxicity

(repeated exposure)

Not classified.

Aspiration hazard Not Applicable.

12. Ecological information

12.1 Toxicity

Toxicity to algae

See component information below.

Toxicity to fish

See component information below.

Toxicity to daphnia and other aquatic invertebrates

See component information below.

Component	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Alkyl ether sulfate ethoxylated, sodium salt 219756-63-5 (1 - 5)	No information available	No information available	No information available

12.2 Persistence and degradability

No product level data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT) This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

12.6 Other adverse effects.

None known.

13. Disposal considerations





13.1 Waste treatment methods

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

Contaminated packaging Empty containers should be taken for local recycling, recovery or waste disposal.

14. Transport information

14.1 UN Number

UN No. (DOT)
UN No. (TDG)
UN/ID No. (ADR/RID/ADN/ADG)
UN No. (IMDG)
UN No. (ICAO)

Not regulated
Not regulated
Not regulated
Not regulated

14.2 Proper shipping name

The product is not covered by international regulation on the transport of dangerous goods

14.3 Hazard class(es)

DOT Hazard class
TDG Hazard class
ADR/RID/ADN/ADG Hazard class
IMDG Hazard class
ICAO Hazard class/division
Not regulated
Not regulated
Not regulated
Not regulated

14.4 Packing group

DOT Packing group
TDG Packing group
ADR/RID/ADN/ADG Packing group
IMDG Packing group
ICAO Packing group
Not regulated
Not regulated
Not regulated
Not regulated

14.5 Environmental hazard

Marine pollutant No

14.6 Special precautions

Not Applicable

15. Regulatory information

International inventories

USA (TSCA) Complies Does not Comply Canada (DSL) Mexico (INSQ) Does not Comply **European Union (EINECS and ELINCS)** Does not Comply **Philippines (PICCS)** Does not Comply Japan (ENCS) Does not Comply China (IECSC) Does not Comply Australia (AICS) Does not Comply Korean (KECL) Does not Comply New Zealand (NZIoC) Does not Comply





U.S. Federal and State Regulations

SARA 311/312 Hazard Categories

Immediate (acute) health hazard.

Component	SARA 302 / TPQs	SARA 313	CERCLA RQ
Alkyl ether sulfate ethoxylated, sodium salt	N/A	N/A	N/A

State Comments

Proposition 65: This product is not known to contain chemicals considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing cancer and/or reproductive toxicity at levels that are expected to pose a significant risk under anticipated use conditions.

Canadian Classification

This product may not be distributed or used in Canada.

16. Other information			
Supersedes date	05/May/2015		
Revision date	16/Jun/2015		
Version	2		

The following sections have been 1, 2, 3, 8, 11, 12, 14, 15, 16.

revised

HMIS classification

Health	1
Flammability	0
Physical hazard	0
PPE	X

Disclaimer

The information contained herein is considered in good faith as reliable of the date issued and is based upon on measurements, tests or data derived from supplier's own study or furnished by others. In providing this SDS information, Supplier makes no express or implied warranties as to the information or product; merchantability or fitness of purpose; any express or implied warranty; or non-infringement of intellectual property rights; and supplier assumes no responsibility for any direct, special or consequential damages, results obtained, or the activities of others. To the maximum extent permitted by law, supplier's warranty obligations and buyer's sole remedies are as stated in separate agreement between the parties.