

SAFETY DATA SHEET

Product Trade Name:
AS-9 ANTI-SLUDGING AGENT

Revision Date:
15-Feb-2017

Revision Number:
18

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

Product Identifier

Product Trade Name:
AS-9 ANTI-SLUDGING AGENT

Synonyms

None

Chemical Family

Blend

Internal ID Code

HM000082

Recommended use and restrictions on use

Application:

Anti-sludging Agent

Uses advised against

No information available

Manufacturer's Name and Contact Details

Manufacturer/Supplier

Halliburton Energy Services
14th Floor, CitiBank Tower, Al-Qutayat Street
Dubai, UAE
Telephone Number : +971 43036666

Additional Information

Prepared By

Chemical Stewardship
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Emergency Telephone Number

1-760-476-3959
Global Incident Response Access Code: 334305
Contract Number: 14012

2. HAZARDS IDENTIFICATION

Classification

| | |
|--|--------------------|
| Acute Oral Toxicity | Category 4 - H302 |
| Acute Toxicity - Dermal | Category 5 - H313 |
| Skin Corrosion / Irritation | Category 1 - H314 |
| Serious Eye Damage / Eye Irritation | Category 1 - H318 |
| Carcinogenicity | Category 1A - H350 |
| Reproductive Toxicity | Category 1B - H360 |
| Specific Target Organ Toxicity - (Single Exposure) | Category 3 - H335 |
| Acute Aquatic Toxicity | Category 1 - H400 |

| | |
|--------------------------|-------------------|
| Chronic Aquatic Toxicity | Category 3 - H412 |
| Flammable liquids | Category 3 - H226 |

Hazard Pictograms**Signal Word**

Danger

Hazard Statements

H302 - Harmful if swallowed
 H313 - May be harmful in contact with skin
 H314 - Causes severe skin burns and eye damage
 H335 - May cause respiratory irritation
 H350 - May cause cancer
 H360 - May damage fertility or the unborn child
 H400 - Very toxic to aquatic life
 H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements**Prevention**

P201 - Obtain special instructions before use
 P202 - Do not handle until all safety precautions have been read and understood
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 P233 - Keep container tightly closed
 P240 - Ground/Bond container and receiving equipment
 P241 - Use explosion-proof electrical/ventilating/lighting/equipment
 P242 - Use only non-sparking tools
 P243 - Take precautionary measures against static discharge
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product
 P271 - Use only outdoors or in a well-ventilated area
 P273 - Avoid release to the environment
 P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
 P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P310 - Immediately call a POISON CENTER or doctor/physician
 P363 - Wash contaminated clothing before reuse
 P370 + P378 - In case of fire: Use CO2, dry chemical, or foam
 P391 - Collect spillage

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
 P403 + P235 - Store in a well-ventilated place. Keep cool
 P405 - Store locked up

Disposal

P501 - Dispose of contents/container to an approved waste disposal plant

Contains**Substances**

Alkylbenzenesulfonic acid
 1-Methoxy-2-propanol

CAS Number

Proprietary
 107-98-2

| | |
|----------------------|-------------|
| Morpholine | 110-91-8 |
| Sulfated salt | Proprietary |
| Sulfuric acid | 7664-93-9 |
| 2-Methoxy-1-propanol | 1589-47-5 |

Additional Information

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Substances | CAS Number | PERCENT (w/w) | GHS Classification |
|---------------------------|-------------|---------------|---|
| Alkylbenzenesulfonic acid | Proprietary | 30 - 60% | Acute Tox. 4 (H302) Acute Tox. 4 (H312) Skin Corr. 1C (H314) Eye Dam. 1 (H318) STOT SE 3 (H335) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412) |
| 1-Methoxy-2-propanol | 107-98-2 | 10 - 30% | Acute Tox. 5 (H303) STOT SE 3 (H336) Flam. Liq. 3 (H226) |
| Morpholine | 110-91-8 | 10 - 30% | Acute Tox. 4 (H302) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1 (H314) Eye Corr. 1 (H318) STOT SE 3 (H335) Aquatic Acute 3 (H402) Flam. Liq. 3 (H226) |
| Sulfated salt | Proprietary | 1 - 5% | Eye Corr. 1 (H318) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411) |
| Sulfuric acid | 7664-93-9 | 0.1 - 1% | Acute Tox. 5 (H303) Skin Irrit. 1A (H314) Eye Corr. 1 (H318) Carc. 1 (H350) STOT SE 3 (H335) Aquatic Acute 3 (H402) |
| 2-Methoxy-1-propanol | 1589-47-5 | 0.1 - 1% | Repr. 1B (H360) STOT SE 3 (H335) Flam. Liq. 3 (H226) |

4. FIRST AID MEASURES**First-aid Measures****Inhalation**

If inhaled, move victim to fresh air and seek medical attention.

Skin

In case of contact, immediately flush skin with plenty of soap and water for at least 30 minutes and remove contaminated clothing, shoes and leather goods immediately. Get medical attention immediately.

Eyes

Immediately flush eyes with large amounts of water for at least 30 minutes. Seek prompt medical attention.

Ingestion

Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical attention.

Most important symptoms and effects, both acute and delayed

Causes severe eye irritation which may damage tissue. Causes severe skin irritation with tissue destruction. May cause respiratory irritation. Harmful if swallowed. May be harmful in contact with skin. Carcinogen. Potential reproductive hazard. May cause birth defects.

Indication of any immediate medical attention and special treatment needed**Notes to Physician**

Treat symptomatically.

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.

Specific hazards arising from the chemical

Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Decomposition in fire may produce harmful gases.

Special protective actions for fire-fighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Use appropriate protective equipment. Remove sources of ignition. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Ensure adequate ventilation.

Environmental Precautions

Prevent from entering sewers, waterways, or low areas.

Methods and material for containment and cleaning up

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.

Additional Information

See Section 8 and 13 for additional information.

7. HANDLING AND STORAGE**Precautions for safe handling**

Use appropriate protective equipment. Remove sources of ignition. Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Ensure adequate ventilation. Wash hands after use. Launder contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Store away from alkalis. Store away from oxidizers. Keep container closed when not in use. Product has a shelf life of 24 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Limits**

| Substances | CAS Number | United Arab Emirates | Bahrain | Kuwait | Gulf Cooperation Council |
|----------------------|------------|--|--|---|--|
| 1-Methoxy-2-propanol | 107-98-2 | TWA: 100 ppm TWA: 369 mg/m ³ STEL: 150 ppm STEL: 553 mg/m ³ | TWA: 100 ppm TWA: 369 mg/m ³ STEL: 150 ppm STEL: 553 mg/m ³ | Not applicable | TWA: 100 ppm TWA: 369 mg/m ³ STEL: 150 ppm STEL: 553 mg/m ³ |
| Morpholine | 110-91-8 | TWA: 20 ppm TWA: 71 mg/m ³ | TWA: 20 ppm TWA: 71 mg/m ³ | TWA: 70.0 mg/m ³ TWA: 20.0 ppm STEL: 105 mg/m ³ STEL: 30.0 ppm | TWA: 20 ppm TWA: 71 mg/m ³ |
| Sulfuric acid | 7664-93-9 | TWA: 1 mg/m ³ | TWA: 1 mg/m ³ | TWA: 1.0 mg/m ³ | TWA: 1 mg/m ³ |

| | | | | | |
|--|--|---------------------------|---------------------------|-----------------------------|---------------------------|
| | | STEL: 3 mg/m ³ | STEL: 3 mg/m ³ | STEL: 3.0 mg/m ³ | STEL: 3 mg/m ³ |
|--|--|---------------------------|---------------------------|-----------------------------|---------------------------|

Appropriate engineering controls

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

Individual protection measures, such as personal protective equipment

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

Respiratory Protection

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

Hand Protection

Impervious rubber gloves.

Skin Protection

Rubber apron.

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:

Amine

Odor Threshold:

No information available

pH:

0.78

Specific Gravity

1.07

Freezing Point/Range (°C):

No information available

Boiling Point/Range (C):

No information available

Flash Point/Range (°C):

No information available

Flash Point Method:

PMCC

Flammability Limits in Air - Lower (%):

No information available

Flammability Limits in Air - Upper (%):

No information available

Autoignition Temperature (°C):

No information available

Evaporation Rate (Butyl Acetate=1):

No information available

Vapor Pressure @ 20 C (mmHg):

No information available

Vapor Density (Air=1):

No information available

Water Solubility

Soluble in water

Decomposition Temperature (C):

No information available

Viscosity, Dynamic @ 20 C (centipoise):

No information available

Viscosity, Kinematic @ 20 C (centistokes):

No information available

Partition Coefficient/n-Octanol/Water:

No information available

Molecular Weight (g/mole):

No information available

10. STABILITY AND REACTIVITY

Reactivity

Not expected to be reactive.

Chemical Stability

Stable

Possibility of hazardous reactions

Will Not Occur

Conditions to Avoid

Keep away from heat, sparks and flame.

Incompatible materials

Strong alkalis. Strong oxidizers.

Hazardous decomposition products

Oxides of sulfur. Carbon monoxide and carbon dioxide.

Additional Guidelines

Not Applicable

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects**Acute Toxicity****Inhalation**

Causes severe respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Eye Contact

Causes severe eye burns.

Skin Contact

May be harmful in contact with skin. Causes severe burns. May be absorbed through the skin and produce effects similar to those caused by inhalation and/or ingestion.

Ingestion

Harmful if swallowed. Causes burns of the mouth, throat and stomach.

Chronic Effects/Carcinogenicity

This product is a carcinogen. Prolonged or repeated exposure may cause liver, kidney and lung effects. May cause heritable genetic damage. Suspected of damaging fertility or the unborn child.

Toxicology data for the components

| Substances | CAS Number | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------------------|-------------|--|--|--|
| Alkylbenzenesulfonic acid | Proprietary | 530 mg/kg (Rat) 775 mg/kg (Rat) 1350 mg/kg (Rat) 1470 mg/kg (Rat) (similar substance) | 530 mg/kg (Rat) 2000 mg/kg (Rabbit) | No data available |
| 1-Methoxy-2-propanol | 107-98-2 | 5200 mg/kg (Rat) 3739 mg/kg (Rat) 4016 mg/kg (Rat) | 13000 mg/kg (Rabbit) > 2000 mg/kg (Rat) | 54.6 mg/L (Rat) 4h 24 mg/L (Rat) 1h 27.8 mg/L (Rat) 6h |

| | | | | |
|----------------------|-------------|---|--|--|
| Morpholine | 110-91-8 | 1050 mg/kg (Rat) 1600 mg/kg (Rat) | 310 mg/kg (Rabbit) 500 mg/kg (Rabbit) | 7.8 mg/L (Rat) 4h |
| Sulfated salt | Proprietary | 988 mg/kg (Rat) 1976 mg/kg (Rat) > 2000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | No data available |
| Sulfuric acid | 7664-93-9 | 2140 mg/kg-bw (rat) | No data available | No data available |
| 2-Methoxy-1-propanol | 1589-47-5 | 5710 mg/kg (Rat) | 5660 mg/kg (Rabbit) | >6.0 mg/L (Rat) 4h >36.9 mg/L (Rat) 4h 553 mg/L (Rat) 4h |

| Substances | CAS Number | Skin corrosion/irritation | | |
|---------------------------|------------|---|--|--|
| Alkylbenzenesulfonic acid | | Skin, rabbit: Causes burns | | |
| 1-Methoxy-2-propanol | 107-98-2 | Not irritating to skin in rabbits. (Rabbit) | | |
| Morpholine | 110-91-8 | Skin, rabbit: Extremely corrosive and destructive to tissue | | |
| Sulfated salt | | Not irritating to skin in rabbits. | | |
| Sulfuric acid | 7664-93-9 | Causes severe burns | | |
| 2-Methoxy-1-propanol | 1589-47-5 | No data of sufficient quality are available. | | |

| Substances | CAS Number | Serious eye damage/irritation | | |
|---------------------------|------------|--|--|--|
| Alkylbenzenesulfonic acid | | Eye, rabbit: Causes eye burns | | |
| 1-Methoxy-2-propanol | 107-98-2 | Non-irritating to rabbit's eye | | |
| Morpholine | 110-91-8 | Eye, rabbit: Corrosive to eyes Causes severe eye irritation. Will damage tissue. | | |
| Sulfated salt | | Causes severe eye irritation which may damage tissue. (Rabbit) | | |
| Sulfuric acid | 7664-93-9 | Causes serious eye damage | | |
| 2-Methoxy-1-propanol | 1589-47-5 | No data of sufficient quality are available. | | |

| Substances | CAS Number | Skin Sensitization | | |
|---------------------------|------------|--|--|--|
| Alkylbenzenesulfonic acid | | Did not cause sensitization on laboratory animals (guinea pig) | | |
| 1-Methoxy-2-propanol | 107-98-2 | Did not cause sensitization on laboratory animals (guinea pig) | | |
| Morpholine | 110-91-8 | Did not cause sensitization on laboratory animals (guinea pig) | | |
| Sulfated salt | | Did not cause sensitization on laboratory animals | | |
| Sulfuric acid | 7664-93-9 | Not regarded as a sensitizer. | | |
| 2-Methoxy-1-propanol | 1589-47-5 | No information available. | | |

| Substances | CAS Number | Respiratory Sensitization | | |
|---------------------------|------------|---------------------------|--|--|
| Alkylbenzenesulfonic acid | | No information available | | |
| 1-Methoxy-2-propanol | 107-98-2 | No information available | | |
| Morpholine | 110-91-8 | No information available | | |
| Sulfated salt | | No information available | | |
| Sulfuric acid | 7664-93-9 | No information available | | |
| 2-Methoxy-1-propanol | 1589-47-5 | No information available. | | |

| Substances | CAS Number | Mutagenic Effects | | |
|---------------------------|------------|--|--|--|
| Alkylbenzenesulfonic acid | | In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects. | | |
| 1-Methoxy-2-propanol | 107-98-2 | Not regarded as mutagenic. | | |
| Morpholine | 110-91-8 | In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects. | | |
| Sulfated salt | | In vitro tests did not show mutagenic effects. | | |
| Sulfuric acid | 7664-93-9 | Not regarded as mutagenic. | | |
| 2-Methoxy-1-propanol | 1589-47-5 | Not mutagenic in AMES Test. | | |

| Substances | CAS Number | Carcinogenic Effects | | |
|---------------------------|------------|---|--|--|
| Alkylbenzenesulfonic acid | | No information available | | |
| 1-Methoxy-2-propanol | 107-98-2 | Did not show carcinogenic effects in animal experiments | | |
| Morpholine | 110-91-8 | Did not show carcinogenic effects in animal experiments | | |
| Sulfated salt | | Not regarded as carcinogenic. | | |
| Sulfuric acid | 7664-93-9 | This substance is a potential carcinogen. | | |
| 2-Methoxy-1-propanol | 1589-47-5 | No information available | | |

| Substances | CAS Number | Reproductive toxicity | | |
|---------------------------|------------|--|--|--|
| Alkylbenzenesulfonic acid | | No data of sufficient quality are available. | | |
| 1-Methoxy-2-propanol | 107-98-2 | Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. | | |
| Morpholine | 110-91-8 | Did not show teratogenic effects in animal experiments. Animal testing did not show any effects on fertility. (similar substances) | | |

| | | |
|----------------------|-----------|--|
| Sulfated salt | | Not regarded as a reproductive and developmental toxicant. (similar substances) |
| Sulfuric acid | 7664-93-9 | Did not show teratogenic effects in animal experiments. |
| 2-Methoxy-1-propanol | 1589-47-5 | Fetotoxic and teratogenic effects observed in experimental animals at concentrations that did not produce maternal toxicity. |

| Substances | CAS Number | STOT - single exposure |
|---------------------------|------------|---|
| Alkylbenzenesulfonic acid | | May cause respiratory irritation. |
| 1-Methoxy-2-propanol | 107-98-2 | May cause disorder and damage to the Central Nervous System (CNS) |
| Morpholine | 110-91-8 | May cause respiratory irritation. |
| Sulfated salt | | No information available |
| Sulfuric acid | 7664-93-9 | May cause respiratory irritation. No information available |
| 2-Methoxy-1-propanol | 1589-47-5 | May cause respiratory irritation. |

| Substances | CAS Number | STOT - repeated exposure |
|---------------------------|------------|---|
| Alkylbenzenesulfonic acid | | No data of sufficient quality are available. |
| 1-Methoxy-2-propanol | 107-98-2 | No significant toxicity observed in animal studies at concentration requiring classification. |
| Morpholine | 110-91-8 | No significant toxicity observed in animal studies at concentration requiring classification. |
| Sulfated salt | | No significant toxicity observed in animal studies at concentration requiring classification. |
| Sulfuric acid | 7664-93-9 | Not applicable due to corrosivity of the substance. |
| 2-Methoxy-1-propanol | 1589-47-5 | No significant toxicity observed in animal studies at concentration requiring classification. |

| Substances | CAS Number | Aspiration hazard |
|---------------------------|------------|---------------------------|
| Alkylbenzenesulfonic acid | | Not applicable |
| 1-Methoxy-2-propanol | 107-98-2 | No information available |
| Morpholine | 110-91-8 | Not applicable |
| Sulfated salt | | No information available |
| Sulfuric acid | 7664-93-9 | Not applicable |
| 2-Methoxy-1-propanol | 1589-47-5 | No information available. |

12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effects Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

| Substances | CAS Number | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Toxicity to Invertebrates |
|---------------------------|-------------|--|---|--|--|
| Alkylbenzenesulfonic acid | Proprietary | EC50 (96h) 170 mg/L (Selenastrum capricornutum) | LC50 (96h) 3 mg/L (Oncorhynchus mykiss) NOEC (90d) 0.25 mg/L (Tilapia mossambica) (similar substance) | No information available | EC50 (48h) 2.9 mg/L (Daphnia magna) EC50 (24h) 5.9 mg/L (Daphnia magna) |
| 1-Methoxy-2-propanol | 107-98-2 | EC50 (96h) > 1000 mg/L (Desmodesmus subspicatus) | LC50 (96h) 6812 mg/L (Leuciscus idus) | No information available | LC50 (48h) > 23300 mg/L (Daphnia magna) |
| Morpholine | 110-91-8 | EC50 (96h) 28 mg/L (Pseudokirchneriella subcapitata) | LC50 (96h) 83 mg/L (Pimephales promelas) LC50 (96h) 180 mg/L (Oncorhynchus mykiss) LC50 (96h) 240 mg/L (Oncorhynchus mykiss) LC50 (96h) 380 mg/L (Oncorhynchus mykiss) | EC20 (30min) >1000 mg/L (Activated sludge, industrial) | EC50 (48h) 45 mg/L (Daphnia magna) EC50 (48h) 207 mg/L (Daphnia magna) |
| Sulfated salt | Proprietary | No information available | LC50 (96h) 3.85 mg/L (Pimephales promelas) | No information available | LC50 (48h) 1.64 mg/L (Daphnia magna) NOEC (7d) 0.65 mg/L (Ceriodaphnia dubia) |
| Sulfuric acid | 7664-93-9 | No information available | LC50 (96 h) 16 mg/L (Lepomis macrochirus) LC50 (96 h) 42 mg/L (Gambusia affinis) | No information available | EC50 (24 h) 29 mg/L (Daphnia magna) EC50 (48 h) 42.5 mg/L (Pandalus montagui) |
| 2-Methoxy-1-propanol | 1589-47-5 | EC50 (96h) 7153 mg/L (Green algae) | LC50 (96h) 16,500 mg/L (Pimephales promelas) LC50 (96h) 4998 mg/L (Pimephales promelas) | No information available | EC50 (48h) 19,000 mg/L (Daphnia magna) LC50 (96h) 24,965 mg/L (Mysid shrimp) LC50 (16d) 228 mg/L |

| | | | | | |
|--|--|--|--|--|-----------|
| | | | | | (Daphnid) |
|--|--|--|--|--|-----------|

Persistence and degradability

| Substances | CAS Number | Persistence and Degradability |
|---------------------------|-------------|--|
| Alkylbenzenesulfonic acid | Proprietary | (94% @ 28d) |
| 1-Methoxy-2-propanol | 107-98-2 | (96% @ 28d) |
| Morpholine | 110-91-8 | Readily biodegradable |
| Sulfated salt | Proprietary | (58% @ 28d) |
| Sulfuric acid | 7664-93-9 | Readily biodegradable |
| 2-Methoxy-1-propanol | 1589-47-5 | Readily biodegradable (similar substances) |

Bioaccumulation potential

| Substances | CAS Number | Log Pow |
|---------------------------|-------------|-----------------------------------|
| Alkylbenzenesulfonic acid | Proprietary | Log Pow = 4.15 |
| 1-Methoxy-2-propanol | 107-98-2 | -0.437 BCF = 3.16 (calculated) |
| Morpholine | 110-91-8 | -0.86 |
| Sulfated salt | Proprietary | 3.3 - 3.8 |
| Sulfuric acid | 7664-93-9 | No information available |
| 2-Methoxy-1-propanol | 1589-47-5 | Log Kow = -0.45 BCF = 10 |

Mobility in soil

| Substances | CAS Number | Mobility |
|---------------------------|-------------|---------------------------|
| Alkylbenzenesulfonic acid | Proprietary | No information available |
| 1-Methoxy-2-propanol | 107-98-2 | No information available |
| Morpholine | 110-91-8 | No information available |
| Sulfated salt | Proprietary | No information available |
| Sulfuric acid | 7664-93-9 | No information available |
| 2-Methoxy-1-propanol | 1589-47-5 | No information available. |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal methods**

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

Contaminated Packaging

Follow all applicable national or local regulations.

Other Information

No information available

14. TRANSPORT INFORMATION**UN Number**

UN2924

UN proper shipping name:

Flammable Liquid, Corrosive, N.O.S.

(Contains Propylene Glycol Monomethyl Ether, Dodecylbenzenesulfonic Acid)

Transport Hazard Class(es):

3 (8)

Packing Group:

III

Environmental Hazards:

Not applicable

Special Precautions for User

None

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15. REGULATORY INFORMATION**Regulatory Information**

This SDS was prepared in accordance with United Nations "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)" and its revisions.

16. OTHER INFORMATION**Key literature references and sources for data**

www.ChemADVISOR.com/

Revision Date:

15-Feb-2017

Revision Note

SDS sections updated: 2

Disclaimer Statement

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End of Safety Data Sheet