AQM 198

MATERIAL SAFETY DATA SHEET

1. DEFINITION OF MATERIAL AND COMPANY

1.1 Product Name: AQM 198

1.2 Application: Membrane cleaning compound

1.3 Company Information:

Headquarters:

MEMPA PAZARLAMA INSAAT SAN. ve TIC. A.S.

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1.4 Emergency telephone: 00 90 212 886 91 26

2. DEFINITION OF HAZARD

2.1 Classification of the substance or product:

Classification in accord with Directive (AT) Numbered 1272/2008:

Skin corrosion/irritation - Category 1A H314

Classification in accord with AB Directives 67/548/AET or 1999/45/ET:

This product is classified as dangerous in accordance with the Preparations Directive 1999/45/EC

Xi, IRRITANT R36/38

Refer to Section 16 for full details of the risk phrases, hazard statements and Notas.

2.2 Label information and records:

Labelling according to Regulation (EC) No. 1272/2008:

Contains: Sodium Hydroxide

Hazard Pictograms:

Signal Word: Danger

Hazard Statements:

H314 Causes severe skin burns and eye damage.

Precaution explanations:

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

P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P360 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	Store locked up
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards:

No known hazards.

3. COMPOSITION ON INGREDIENTS

3.1 Solid matter:

No data available.

3.2 Mixture:

The details below include all impurities and by-products that contribute to the product classification or that havea occupational exposure limit.

Hazardous Substance(s)	% (w/w)	Classification according to Regulation (EC) No 1272/2008	Classification according to 67/548/EEC
Sulfuric acid, mono-C10-16-alkyl,esters, sodium salts EC-No.: 271-557-7 CAS-No.: 68585-47-7	5,0 -10	Skin irritation 2: H315 Serious eye damage/eye irritation :H318 1	Xi R38,R41
EO - Dodecyl Alcohol Ammonium Sulfate EC-No.:Polymer CAS-No.:32612-48-9	1,0 -5,0	Skin irritation 2: H315 Serious eye damage/eye irritation:H318 1	Xi R38,R41
Ethoxylated Alcohol EC-No.: Polymer CAS-No.: 68131-39-5	0,0-1,0	Acute toxicity 4: H302 Acute aquatic toxicity 1:H400 Serious eye damage/eye irritation :H318 1	Xn NR22, R41, R50

Refer to Section 16 for full details of the risk phrases, hazard statements and Notas.

4.FIRST AID MEASURES

4.1 Definition of required first aid measures:

In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency.

If inhaled:

Remove to fresh air. If any symptoms continue receive medical attention.

In case of eye contact:

Rinse with plenty of water for 15 minutes immediately. Receive medical attention.

Ingestion:

Seek medical advice immediately, showing the label and/or SDS. If conscious, washout mouth and give water to drink. If unconsious, do not give anything by mouth, place in the recovery position, check breathing and pulse. If necessary give artifical respiration. Do not induce vomiting without medical advice.

Skin contact:

Get immediate medical attention. Remove contaminated clothing. Wash clothing before reuse. Immediately flush with plenty of water for at least 15 minutes. For a large splash, flood body under a shower. Prompt action is essential in case of contact.

Protection of first aiders :

Use sufficient personal protection equipment.

4.2 Most important symptoms and effects, both acute and delayed:

Causes severe skin burns and eye damage.

4.3 Indication of any immediate medical attention and special treatment needed:

Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition. Probable mucosal damage may contraindicate the use of gastric lavage.

5.FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

This product would not be expected to burn unless all the water is boiled away. The remaining organics may be ignitable. Use extinguishing media appropriate for surrounding fire.

5.2 Special hazards arising from the substance or mixture:

May evolve oxides of carbon (COx) under fire conditions. May evolve oxides of sulfur (SOx) under fire conditions. In the event of a spill, prevent material and fire water from entering sewers or waterways.

5.3 Advice for Firefighters:

Special precautions and protective equipment for firefighters:

In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

6.ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

ADVICE FOR NON-EMERGENCY PERSONNEL

This material may be hazardous by contact, do not attempt to clean up the spill. Call trained emergency responders immediately.

Clean up only to be done by Emergency responders/personnel. Restrict access to area as appropriate until clean-up operations are complete. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection).

ADVICE FOR EMERGENCY RESPONDERS

Restrict access to area as appropriate until clean-up operations are complete. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Ventilate spill area if possible. Ensure clean-up is conducted by trained personnel only. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Notify appropriate government, occupational health and safety and environmental authorities.

6.2 Environmental precautions:

In the event of a spill, prevent material from entering sewers or waterways. Do not allow material to contaminate ground water system. Prevent product from entering drains. If drains, streams, soil or sewers become contaminated, notify local authority.

6.3 Methods and materials for containment and cleaning:

Spillages in small areas:

Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area.

Spillages in large areas:

Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Clean contaminated surfaces with water or aqueous cleaning agents. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

6.4 Reference to other sections:

For emergency information see section 1. For personal protection see section 8. For elimination of waste material see section 13.

7.HANDLING AND STORAGE

7.1 Conditions about safe use:

Handling:

Prevent contact with skin, eyes and clothing. Use with adequate ventilation. Do not breathe vapors/gases/dust. Keep the containers closed when not in use. Do not mix with acids. Keep away from acids and oxidizing agents. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Refer to section 6.2 for Environmental Precautions

Hygiene Recommendations:

Use good work and personal hygiene practices to avoid exposure. Keep an eye wash fountain available. Keep a safety shower available. Always wash thoroughly after handling chemicals. When handling this product never eat, drink or smoke. Eye wash station and safety shower are necessary. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

7.2 Conditions for safe storage, including any incompatabilities:

Storage conditions:

Keep in containers with suitable labels. Keep container tightly closed. Store separately from acids.

Suitable packaging materials:

Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.

7.3 Specific end uses:

Specific use(s): Membrane cleaning compound

8.EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:

Exposure guidelines have not been established for this product. Available exposure limits for the substance(s) are shown below.

Source	Substance(s)	Category:	ppm	mg / m³
United Kingdom	Sodium Hydroxide	STEL		2

* A skin notation refers to the potential significant contribution to overall exposure by the cutaneous route, including mucous membranes and the eyes.

MONITORING MEASURES

A small volume of air is drawn through an absorbant or barrier to trap the substance(s) which can then be desorbed or removed and analyzed as referenced below:

Substance(s)	Method	Analysis	Absorbant
Sodium Hydroxide	US NIOSH: 7401	Titration	PTFE filter

This product does not contain any substance with a specified exposure limit.

DNEL

Components:

Ethoxylated Alcohol

END USE	Exposure routes	Potential health	Value
Workers	Dermal	long term - systemic	2080 mg/kg
Workers	Inhalation	long term - systemic	294 mg/m³

PNEC

Components:

Ethoxylated Alcohol	Value
Fresh water	0.0446 mg/l
Marine water	0.0446 mg/l
Intermittent release	0.0446 mg/l
STP	10000 mg/l

Fresh water sediment	41.3 mg/kg
Marine sediment	41.3 mg/kg
Soil	1 mg/kg

8.2 Exposure controls:

Ventilation:

General ventilation is recommended.

Personal protection equipment:

General advice:

The use and choice of personal protection equipment is related to the hazard of the product, the workplace and the way the product is handled. In general, we recommend as a minimum precaution that safety glasses with side-shields and workclothes protecting arms, legs and body be used. In addition any person visiting an area where this product is handled should at least wear safety glasses with side-shields.

Eye protection /Face protection:

Wear a face shield with chemical splash goggles. The applicable European standard can be found in EN 166.

Skin protection:

When handling this product, the use of chemical gauntlets is recommended. The choice of work glove depends on work conditions and what chemicals are handled, but we have positive experience under light handling conditions using gloves made from PVC . Gloves should be replaced immediately if signs of degradation are observed. Breakthrough time not determined as preparation, consult PPE manufacturers. The applicable European standard can be found in EN 374. When handling this product, the use of a chemical resistant suit and rubber boots is recommended. The applicable European standard can be found in EN ISO 20345.

Respiratory protection:

Where concentrations in air may exceed the limits given in this section, the use of a half face filter mask or air supplied breathing apparatus is recommended. A suitable filter material depends on the amount and type of chemicals being handled. Consider the use of filter type: P The applicable European standard can be found in EN 140, EN 137, EN 143 and EN 14387. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

9.PHYSICAL AND CHEMICAL PROPERTIES

Note: These physical properties are typical values for the product and may vary according to the conditions.

9.1 Information on basic physical and chemical properties:

Physical State	Viscous liquid
Apperance	Translucent
Odour	Amine

Odour Threshold	No data available
pH (100%)	12,4
Freezing /Melting/Pour Point	No data available
Initial Boiling Point/ Boiling Range	No data available
Flash Point	> 200 F / > 93.3 ºC
Evaporation Rate	No data available
Flammability(solid,gas)	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Relative Density	1.04 (25 °C)
Density	No data available
Solubility in Water	Complete
Octanol/Water Coefficient (log Kow)	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No applicable
Oxidizing Properties	No applicable

9.2 Other information:

Not applicable

10.STABILITY AND REACTIVITY

10.1 Reactivity:

Stable under normal conditions.

10.2 Chemical stability:

Stable under normal conditions.

10.3 Possibility of hazardous reactions:

Hazardous polymerization will not occur.

10.4 Conditions to avoid:

Avoid extreme of temperatures.

10.5 Incompatible materials:

Acids Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, sulfonic) may generate heat, splattering or boiling and toxic vapors.

10.6 Hazardous decomposition products:

Under fire conditions	Oxides of carbon, Oxides of sulfur

11.TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Product:

Acute oral toxicity	Based on available data, the classification criteria are not met.
Acute inhalation toxicity	Based on available data, the classification criteria are not met.
Acute dermal toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Causes severe skin burns and eye damage.
Respiratory or skin sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Contains no ingredient listed as a mutagen
Assessment carcinogenicity	Based on available data, the classification criteria are not met.

None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

Reproductive toxicity	Based on available data, the classification criteria are not met.
Assessment: No toxicity to reproduction	
STOT - single exposure	Remarks: Based on available data, the classification criteria are not met.
STOT - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration toxicity	No aspiration toxicity classification

Components:

Ethoxylated alcohol

Acute dermal toxicity	LD50: > 2,000 mg/kg, Rat, OECD 402, GLP: No
Skin corrosion/irritation	Rabbit, Result: Not irritating, OECD 404, 4 h, GLP: Yes :
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory or skin sensitization	Guinea pig, Result: negative, OECD 406, GLP: No
Germ cell mutagenicity	
Genotoxicity in vitro	Ames test, Result: negative, OECD 471, GLP: No Chromosome aberration test in vitro, Result: negative OECD 473, Read-across (Analogy), In vitro gene mutation study in mammalian cells, Result: negative, OECD 476, Read-across (Analogy)
Assessment	In vitro tests did not show mutagenic effects

12.ECOLOGICAL INFORMATION

12.1 Toxicity:

No toxicity studies have been conducted on this product.

Product:

Ecotoxicology Assessment:

Acute aquatic toxicity	Not expected to be harmful to aquatic organisms.
Chronic aquatic toxicity	Not expected to demonstrate chronic toxicity to aquatic organisms.

Product:

Ethoxylated alcohol	
Toxicity to fish	LC50: 3.1 mg/l, 96 h, Turbot, Other guidelines.
Toxicity to daphnia and other	
Aquatic invertebrates	EC50: 0.14 mg/l, 48 h, Daphnia magna, GLP: No
Toxicity to algae	EC50: 0.75 mg/l, 72 h, Green Algae (Pseudokirchneriella subcapitata, previously Selenastrum capricornutum), GLP: No
Toxicity to bacteria	EC50: > 10,000 mg/l, 16.9 h, Pseudomonas putida, DIN 38412 T.8,
Read-across (Analogy)	
Toxicity to fish(Chronic toxicity)	NOEC: 0.28 mg/l, 30 d, Fathead Minnow, GLP: No
Toxicity to daphnia and other	
aquatic invertebrates (Chronic toxicity)	NOEC: 0.77 mg/l, 21 d, Daphnia magna, Other guidelines GLP: No, Read-across (Analogy)

12.2 Persistence and degradability:

Product:

Biodegradability	The organic portion of this preparation is expected to be readily biodegradable.

Components:

Ethoxylated alcohol biodegradability	72 %, Result: Readily biodegradable, Exposure time: 28 d, OECD 301 B (Modified Strum Test)

12.3 Bioaccumulative potential:

Product:

Bioaccumulation	This preparation or material is not expected to bioaccumulate.

Components:

Ethoxylated alcohol bioaccumulation	Potential bioaccumulation.

12.4 Mobility in soil:

Product:

Environmental fate and pathway	This substance is water soluble and is expected to remain primarily in water.

12.5 Results of PBT and vPvB assessment:

Product:

PBT	This mixture contains no substance considered to be persistent, bioaccumulating nor toxic.
VPvB	This mixture contains no substance considered to be very persistent nor very bioaccumulating.

12.6 Other adverse effects:

Additional ecological information	No adverse effects expected.

13. DISPOSAL CONSIDERATIONS

If this preparation becomes a waste, the final user must define and assign the appropriate European Waste Catalogue code. Use only authorized contractors. Ensure compliance with EC, national and local regulations.

13.1 Waste treatment methods:

Any chemical waste is a potential environmental pollutant and is NOT suitable for disposal via ground, municipal sewers, drains, natural streams or rivers. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of wastes in an approved incinerator or waste treatment/disposal site, in accordance with all applicable regulations. Do not dispose of wastes in local sewer or with normal garbage. Empty drums should be taken for recycling, recovery, or disposal through a suitably qualified or licensed contractor.

EUROPE WASTE CODE:

16 03 03* - OFF SPECIFICATION BATCHES AND UNUSED PRODUCTS - Inorganic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code.

14. TRANSPORT INFORMATION

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper Shipping Name / Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are as follows.

LAND TRANSPORT

14.1 UN number:	UN 3266
14.2 UN proper shipping name:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.(Sodium Hydroxide)
14.3 Transport Hazard class(es):	8

14.4 Packing group:	III
14.5 Environmental hazards:	No
14.6 Special precautions for user:	Not applicable

AIR TRANSPORT (ICAO/IATA)

14.1 UN number:	UN 3266
14.2 UN proper shipping name:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.(Sodium Hydroxide)
14.3 Transport Hazard class(es):	8
14.4 Packing group:	III
14.5 Environmental hazards:	No
14.6 Special precautions for user:	Not applicable

SEA TRANSPORT (IMDG/IMO)

14.1 UN number:	UN 3266
14.2 UN proper shipping name:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.(Sodium Hydroxide)
14.3 Transport Hazard class(es):	8
14.4 Packing group:	III
14.5 Environmental hazards:	No
14.6 Special precautions for user:	Not applicable
14.7 Transportation in large	Not applicable
Annex II of MARPOL 73/78 and the	
IBC Code:	

15.REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislations specific for the substance or mixture:

INTERNATIONAL CHEMICAL CONTROLLING LAWS

Mempa declares that registration, evaluation, authorization (REACH) of the chemicals complies to the EU Regulations fully. Thus we are registering all chemicals used in our product, imported and exported by us.

15.2 Chemical Risk Assessment:

Not required

16.OTHER INFORMATION

List Of Relevant R-Phrases, Notas And Hazard Statements In Section 2.1 And 3

H302	- Harmful if swallowed.
H314	- Causes severe skin burns and eye damage.
H315	- Causes skin irritation.
H318	- Causes serious eye damage.

H400	- Very toxic to aquatic life.
R22	- Harmful if swallowed.
R36/38	- Irritating to eyes and skin.
R38	- Irritating to skin.
R41	- Risk of serious damage to eyes.
R50	- Very toxic to aquatic organisms.

This product Safety Data Sheet provides health, safety, and regulatory information. The information contained in this Safety Data Sheet is based on data available to us at the date of issue , and is provided in good faith, and believed to be accurate and reliable at the date of Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. Please consult your local sales representative for any further information.

References :

This safety data sheet is arranged with the remarks of an expert and in consideration of European Directives ((EC) No. 1907/2006, (EC) No. 1272/2008, 67/548/EEC, 1999/45/EC included), supplier data, internet, ESIS, IUCLID, ERIcards, official regulatory data outside Europe and other data sources.

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