

A Schlumberger Company

Safety Data Sheet

KLA-GARD*

1. Identification of the Substance/Preparation and of the Company/Undertaking

1.1 Product identifier

Product name	KLA-GARD*
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Product code PID857

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

Recommended Use Shale control agent.

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

M-I SWACO, A Schlumberger Company

200 - 125, 9th Avenue SE Calgary, Alberta T2G 0P6, Canada Telephone: 1-780-962-8221

Schlumberger Serviços de Petróleo LTDA

Rua Internacional 500Cavaleiro – Macaé, RJ. CEP: 27.930-075 Telefone: +55 22 3311-7051

E-mail address SDS@slb.com

Prepared by Global Regulatory Compliance - Chemicals (GRC - Chemicals)

1.4 Emergency Telephone Number

Emergency telephone (24 Hour) Asia Pacific +65 3158 1074, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, USA +1 281 561 1600, Canada +1 800 579 7421, Argentina: +54 11 5984 3690, Brazil : 0800-720-8000/0800-777-2323 (WGRA)

2. Hazards Identification

2.1 Classification of the substance or mixture

GHS - Classification

Health hazards Not classified



Environmental hazards	Not classified
Physical Hazards	Not classified

2.2 Label elements

Signal word None

<u>Hazard Statements</u> This product is not classified as hazardous therefore no (H) hazard statements assigned.

Precautionary Statements

This product is not classified as hazardous therefore has no (P) precautionary statements assigned.

Unknown acute toxicity

Not applicable.

3. Composition/information on Ingredients

3.1 Substances

Not applicable

3.2 Mixtures

No classified ingredients, or those having occupational exposure limits, present above the level of disclosure.

Comments

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret

4. First Aid Measures

4.1 First aid measures

Inhalation	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.	
Ingestion	Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.	
Skin contact	Wash skin thoroughly with soap and water. Get medical attention if irritation persists.	
Eye Contact	Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses, if worn. Get medical attention if any discomfort continues.	
4.2. Most important symptoms and effects, both acute and delayed		
General advice	The severity of the symptoms described will vary dependant of the concentration and the length of exposure. If adverse symptoms develop, the casualty should be transferred to	



Symptoms

hospital as soon as possible.

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

Water Fog, Alcohol Foam, CO₂, Dry Chemical.

Extinguishing media which must not be used for safety reasons None known.

5.2. Special hazards arising from the substance or mixture

Unusual fire and explosion hazards

Heating of containers may cause pressure rise, with risk of bursting. Vapors may travel considerable distance to source of ignition and flash back.

Hazardous combustion products

Carbon oxides (COx), Nitrogen oxides (NOx), Ammonia.

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. See also section 8. Solutions extremely slippery when spilled.

6.2 Environmental precautions

The product should not be allowed to enter drains, water courses or the soil. Refer to applicable federal, state and local regulations.

Environmental exposure controls

Local authorities should be advised if significant spillages cannot be contained.



6.3 Methods and material 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.

Methods for cleaning up

Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

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. Ammonia or amines may be released when this component is heated or exposed to high pH.

7.2 Conditions for safe storage, including any incompatibilities

8. Exposure Controls/Personal Protection	
Packaging materials	Use specially constructed containers only.
Storage precautions	Keep containers tightly closed in a dry, cool and well-ventilated place. Avoid heat, flames and other sources of ignition. Avoid contact with:. Oxidizing agents. Acids. Bases.
Technical measures/precautions	Ensure adequate ventilation. Keep airborne concentrations below exposure limits.

8.1 Control parameters

IDLH (Immediately Dangerous to Life or Health)

Immediately Dangerous to Life or Health (IDLH) is established by the US National Institute for Occupational Safety and Health (NIOSH). The purpose of establishing an IDLH value is to ensure that the worker can escape from a given contaminated environment in the event of failure of the most protective respiratory protection equipment. In the event of failure of respiratory protection equipment every effort should be made to exit immediately.

8.2 Exposure controls

A risk assessment is recommended to be performed by a qualified and trained personnel to analyze the worksite and recommends the appropriate controls such as engineering controls, work practice controls, and administrative controls as primary means of reducing employee exposure. When there is a remaining hazards after applying the primary controls, Personal Protective Equipment (PPE) must be used.

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 Controls

Ensure adequate ventilation. Mechanical ventilation or local exhaust ventilation is required. Keep airborne concentrations below exposure limits.

Personal protective equipment Eye protection Hand protection	Tightly fitting safety goggles. Impervious gloves made of: Nitrile Neoprene Break through time >480 minutes Glove thickness >=0.4 mm Be aware that liquid may penetrate the gloves. Frequent change is advisable.
Respiratory Protection	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 an organic vapor cartridge with a P-95 pre-filter attached. In work environments containing oil mist/aerosol, use an organic vapor cartridge with a P-95 pre-filter attached. If exposed to vapors from this product, use a NIOSH/MSHA-approved respirator with an organic vapor cartridge.
Skin and body protection	Wear suitable protective clothing, Eye wash and emergency shower must be available at the work place.
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

9.1 Information on basic physica	al and chemical properties	
Physical state	Liquid	
Appearance	No information available	
Color	Clear - Blue	
Odor	Amine	
Odor threshold	Not applicable	
Property	Values	<u>Remarks</u>
рН		
pH @ dilution	6.5 - 8.5	(1% solution)
Melting / freezing point	No information available	
Boiling point/range	125 °C / 257 °F	
Flash point	> 99 °C / > 210 °F	PMCC
Evaporation rate (BuAc =1)	No information available	
Flammability (solid, gas)	Not applicable	
Flammability Limit in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	1.1	
Bulk density	No information available	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
log Pow	No information available	
Explosive properties	Not applicable	



Oxidizing properties

None known.

9.2 Other information Pour point Molecular weight VOC content(%) Density

No information available No information available None No information available

Comments

The data listed above are typical physical and chemical properties and should not be construed as product specification.

10. Stability and Reactivity

10.1 Reactivity

No data available.

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

Avoid heat, flames and other sources of ignition. Ammonia or amines may be released when this component is heated or exposed to high pH.

10.5 Incompatible materials

Oxidizing agents. Acids. Bases.

10.6 Hazardous decomposition products

See Section 5.2.

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	May cause slight irritation.
Skin contact	Prolonged contact may cause redness and irritation.
Ingestion	Ingestion may cause stomach discomfort.



Sensitization	Not classified.
Mutagenic effects	This product does not contain any known or suspected mutagens.
Carcinogenicity	This product does not contain any known or suspected carcinogens.
Reproductive toxicity	Conclusive but not sufficient for classification.
Developmental toxicity	Component substance is listed on California Proposition 65 as a developmental hazard.
Routes of exposure	Inhalation. Skin contact.
Routes of entry	None known.
Specific target organ toxicity -	Not classified
Single exposure Specific target organ toxicity - Repeated exposure	Not classified.
Aspiration hazard	Not classified.

12. Ecological Information

12.1 Toxicity

Toxicity to algae

This product is not considered toxic to algae.

Toxicity to fish

This product is not considered toxic to fish.

Toxicity to daphnia and other aquatic invertebrates

This product is not considered toxic to invertebrates.

12.2 Persistence and degradability

Readily biodegradable. (ECHA data) (PRODUCT).

12.3 Bioaccumulative potential

Bioaccumulation is unlikely. (ECHA data) (PRODUCT).

12.4 Mobility

Soluble in water.

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 Method	Disposal 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)	Not regulated
UN No. (MT/ANTT)	Not regulated
UN No. (TDG)	Not regulated
UN/ID No. (ADR/RID/ADN/ADG)	Not regulated
UN No. (IMDG/ANTAQ)	Not regulated
UN No. (ICAO/ANAC)	Not regulated
UN No. (DPC)	Not regulated

14.2. UN 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	Not regulated
ANTT Hazard class	Not regulated
TDG Hazard class	Not regulated
ADR/RID/ADN/ADG Hazard class	Not regulated
IMDG/ANTAQ Hazard class	Not regulated
ICAO/ANAC Hazard class/division	Not regulated
DPC Hazard class	Not regulated
14.4 Packing group	
DOT Packing group	Not regulated
ANTT Packing group	Not regulated
TDG Packing group	Not regulated
ADR/RID/ADN/ADG Packing group	Not regulated
IMDG/ANTAQ Packing group	Not regulated
	•
ICAO/ANAC Packing group	Not regulated
ICAO/ANAC Packing group DPC Packing group	•

14.5 Environmental hazard

14.6 Special precautions Not applicable

<u>14.7 Transport in bulk according to Annex I/II of MARPOL 73/78 and the IBC Code</u> Please contact SDS@slb.com for info regarding transport in Bulk.



15. Regulatory Information

International inventories

USA (TSCA) Canada (DSL) Philippines (PICCS) Japan (ENCS) China (IECSC) Australia (AICS) Korean (KECL) New Zealand (NZIoC) Complies Complies Complies Complies Complies Complies Complies

Europe - REACH

All products supplied from the European Economic Area (EEA) are compliant with the REACH Regulation EC 1907/2006.For products supplied from the EEA, Schlumberger and/or its suppliers have pre-registered and is registering all of the substances that it and/or its suppliers manufactures in or imports into the EEA that are subject to Title II of the REACH Regulation. All products supplied from outside the EEA are subject to REACH only if imported into the EEA. The importer of the products must comply with REACH for each imported substance. Contact REACH@slb.com for REACH information.

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SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

SARA 302/304, 313, CERCLA RQ, California Proposition 65

Note: If no components are listed below, this product is not subject to the referenced SARA and CERCLA regulations and is not known to contain a Proposition 65 listed chemical at a level that is expected to pose a significant risk under anticipated use conditions.

California Proposition 65

WARNING



This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Chemical Name	California Proposition 65
Ethylene Glycol 107-21-1	Developmental Toxicity

Canadian Classification

This Safety Data Sheet has been prepared in compliance with the Hazardous Products Regulations.



Brazilian Regulations Brazil Regulation	This SDS was prepared in accordance with Brazil law NBR 14725.	
Federal Police	Not determined	
Army	Not determined	
ANVISA	Not determined	
16. Other Information		
Supersedes date	10/Apr/2018	
Revision date	09/Nov/2018	
Version	12	
This SDS has been revised in the following section(s)	6. Accidental release measures No changes with regard to classification have been made.	
HMIS classification		
Health Flammability Physical hazard PPE	1 1 0 X	

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