

Safety Data Sheet SAFE-COR*

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name SAFE-COR*
Product code PID1370

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

Recommended Use Corrosion inhibitor

Uses advised against Consumer use

1.3 Details of the supplier of the safety data sheet

Supplier

Schlumberger Oilfield UK LTD
Minerva, Manor Royal London Road
Crawley
RH10 9BU
United Kingdom

+44 1293 556655

SDS@slb.com

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

National Poison Center Numbers

Netherlands	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)
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2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

Health hazards

Serious eye damage/eye irritation	Category 1
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Environmental hazards

Chronic aquatic toxicity	Category 3
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Physical Hazards

Not classified

2.2 Label elements



Signal word

DANGER

Hazard Statements

H318 - Causes serious eye damage

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements

P273 - Avoid release to the environment

P280 - Wear protective gloves, protective clothing, eye 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

P310 - Immediately call a POISON CENTER or physician

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Contains

Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues

2.3 Other hazards

Not classified as PBT/vPvB by current EU criteria

3. Composition/information on Ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical Name	EC No	CAS No	Weight-%	Component information
Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues	272-712-1	68909-77-3	30-60	Eye Dam.1 (H318) Aquatic Acute. 3 (H402) Aquatic Chronic. 3 (H412)

Comments

The product contains other ingredients which do not contribute to the overall classification.

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 off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation persists.
Eye Contact	Immediately flush eyes with water for 15 minutes while holding eyelids open. Remove contact lenses, if worn. Seek medical attention at once.

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 hospital as soon as possible.
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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.
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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

None known.

Hazardous combustion products

Thermal decomposition can lead to release of irritating gases and vapors

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.

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. 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. 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.

Hygiene Measures

Use good work and personal hygiene practices to avoid exposure. When using do not eat, drink, smoke, sniff Wash hands and face before breaks and immediately after handling the product Remove contaminated clothing

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/precautions Ensure adequate ventilation.

Storage precautions Keep containers tightly closed in a dry, cool and well-ventilated place Avoid frost. Store at room temperature Avoid contact with: Acids Nitrites

Storage class Chemical storage.

Storage class, TRGS 510, Germany LGK12 - Non-combustible liquids

Packaging materials Use specially constructed containers only.

7.3 Specific end uses

See Section 1.2.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Exposure limits Contains no substances with occupational exposure limit values

No biological limit allocated

Component Information

Chemical Name	EU OEL	Austria	Denmark
Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues	Not determined	Not determined	Not determined
Chemical Name	France	Germany	Hungary
Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues	Not determined	Not determined	Not determined
Chemical Name	Italy	Netherlands	Norway
Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues	Not determined	Not determined	Not determined
Chemical Name	Poland	Portugal	Romania
Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues	Not determined	Not determined	Not determined
Chemical Name	Spain	Switzerland	UK
Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues	Not determined	Not determined	Not determined

Europe - REACH

Derived No Effect Level (DNEL)

Long term exposure systemic effects

Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues

Dermal 10 mg/kg
Inhalation 70.52 mg/m³

Predicted No Effect Concentration (PNEC)

Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues

Fresh Water 0.045 mg/l
Sea Water 0.0004 mg/l
Freshwater sediment 0.796 mg/kg
Sea sediment 0.08 mg/kg
Soil 0.133 mg/kg
Impact on sewage treatment 100 mg/l
Intermittent release 0.45 mg/l

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 Controls

Ensure adequate ventilation. Local exhaust ventilation.

Personal protective equipment

Eye protection

Use eye protection according to EN 166, designed to protect against liquid splashes. Wear chemical splash goggles and face shield.

Hand protection

Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training

Impervious gloves made of: Neoprene PVC Nitrile

Break through time >480 minutes

Glove thickness >= 0.7 mm

Be aware that liquid may penetrate the gloves. Frequent change is advisable.

Respiratory protection

No personal respiratory protective equipment normally required, In case of insufficient ventilation wear suitable respiratory equipment, Respirator with a vapor filter (EN 141), Use respirator with organic vapor protection (A, brown), At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used.

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 and gloves, including the inside, before re-use.



8.2.3 Environmental exposure controls

Environmental exposure

Use appropriate containment to avoid environmental contamination See section 6 for more information

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available
Odor	Slight
Color	Dark amber

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH	~ 10.5	
pH @ dilution	No information available	
Melting point	No information available	
Boiling point/range	> 100 °C / > 212 °F	
Flash point	151.6 °C / 305 °F	PMCC
Evaporation rate (BuAc =1)	No information available	
Flammability	Not applicable	
Explosion limits:		
Upper explosion limit	No information available	
Lower explosion limit	No information available	
Vapor pressure	No information available	
Relative Vapor Density	No information available	
Specific gravity	1.10	
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	4 cP	@ 25 °C
Partition Coefficient (n-octanol/water)	No information available	
Density and/or Relative Density	No information available	
Explosive properties	Not applicable	
Oxidizing properties	None known.	

9.2 Other information

Pour point	-12°C (<11°F)
Molecular weight	No information available
VOC content(%)	None

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 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

Store at room temperature. Avoid frost.

10.5 Incompatible materials

Acids. Do not add nitrites or other nitrosating agents to this product. May cause formation of nitrosamine.

10.6 Hazardous decomposition products

See Section 5.2.

11. Toxicological Information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system.
Eye contact	Causes serious eye damage.
Skin contact	Prolonged contact may cause redness and irritation.
Ingestion	Ingestion may cause stomach discomfort.
Unknown acute toxicity	Not applicable.

Toxicology data for the components

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues	5000 mg/kg (Rat)	>2000 mg/kg (Rat)	No data available

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

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 This product does not contain any known or suspected reproductive hazards.

Routes of Exposure Eye contact.

Routes of entry Eye contact.

Specific target organ toxicity - Single exposure Not classified

Specific target organ toxicity - Repeated exposure Not classified.

Aspiration hazard Not applicable.

11.2 Information on other hazards

Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors.

Other information Key literature references and sources for data. See Section 16 for more information.

12. Ecological Information

12.1 Toxicity

Harmful to aquatic life with long lasting effects

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.

Toxicology data for the components

Chemical Name	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues	OECD; Acute LC50; 96 hours Semi-static; Fish > 45 mg/L	OECD; Acute EC50; 72 hours; Algae; = 45 mg/L	OECD; Acute EC50; 48 hours Static, Daphnia; > 100 mg/L

12.2 Persistence and degradability

Not readily biodegradable.

Chemical Name	Persistence and degradability
Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues	Not readily biodegradable

12.3 Bioaccumulative potential

No bioaccumulation expected due to high molecular weight.

Chemical Name	Bioaccumulation
Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues	Does not bioaccumulate

12.4 Mobility

Mobility

The product is water soluble, and may spread in water systems.

Chemical Name	Mobility
Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues	Soluble in water

Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Not classified as PBT/vPvB by current EU criteria.

12.6 Endocrine disrupting properties.

This product does not contain any known or suspected endocrine disruptors

12.7 Other adverse effects

None known.

12.8 Additional information

Key literature references and sources for data. See Section 16 for more information.

13. Disposal Considerations

13.1 Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

EWC Waste Disposal No

According to the European Waste Catalog, Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used The following Waste Codes are only suggestions: EWC waste disposal No: 07 01 04

14. Transport information

14.1. UN number

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)

ADR/RID/ADN/ADG Hazard class Not regulated

IMDG/ANTAQ Hazard class Not regulated

ICAO/ANAC Hazard class/division Not regulated

14.4 Packing group

ADR/RID/ADN/ADG Packing group Not regulated

IMDG/ANTAQ Packing group Not regulated

ICAO/ANAC Packing group Not regulated

14.5 Environmental hazard

No

14.6 Special precautions

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Please contact SDS@slb.com for info regarding transport in Bulk.

15. Regulatory Information

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

This safety data sheet complies with the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008
Commission Regulation (EU) No 2015/830 of 28 May 2015
Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

Dangerous substance category per Seveso Directive (2012/18/EU)

This product does not contain substances listed under Dangerous substance category per Seveso Directive (2012/18/EU)

Netherlands

Dutch Mining Regulations: In accordance with Mining Regulations 9.2 and Chapter 4 of the Working Conditions Decree.

Germany

Regulations governing systems for handling substances hazardous to waters
Hazardous substances ordinance
Chemicals act

Germany, Water Endangering Classes (VwVwS) Water endangering class = 1

Technical Rules for Hazardous Substances (TRGS) TRGS 220 National aspects when compiling safety data sheets
TRGS 510 Storage of hazardous substances in non stationary containers
TRGS 900 Occupational exposure limits

International inventories

USA (TSCA)	Complies
Canada (DSL)	Complies
Philippines (PICCS)	Complies
Japan (ENCS)	Complies
China (IECSC)	Complies
Australia (AICS)	Complies
Korean (KECL)	Does not comply
New Zealand (NZIoC)	Complies

Europe - REACH

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15.2 Chemical Safety Report

No information available

16. Other Information

Prepared by Global Regulatory Compliance - Chemicals (GRC - Chemicals) , Poh Yue Cheong
Supersedes Date: 14/Nov/2019

Revision date 30/Aug/2022

Version 13

This SDS has been revised in the following section(s) All sections. There have been changes with regard to classification.

Key literature references and sources for data

www.ChemADVISOR.com

Supplier

National Chemical Inventories

National regulatory information

National occupational exposure limits

Training Advice

Do not handle until all safety precautions have been read and understood

Follow general hygiene considerations recognized as common good workplace practices

HMIS classification

Health	3
Flammability	1
Physical hazard	0
PPE	X

Full text of H-Statements referred to under sections 2 and 3

H318 - Causes serious eye damage

H412 - Harmful to aquatic life with long lasting effects

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