



INVENTED TO LAST

كيماويات السعودية

Saudi Chem

# SC 515-SA

Drilling Rheology Modifier

## MATERIAL SAFETY DATA SHEET

### SECTION 1: Identification of Substance/ Preparation and Company Undertaking

#### 1.1 Product identifier:

**Name:** SC 515-SA  
**Description:** Drilling Rheology Modifier

#### 1.2 Relevant identified uses of the substance/mixture:

**Uses:** Oil and gas industry rheology modifier liquid additive  
**Not to be used for:** Any other purposes

#### 1.3 Details of the supplier of the safety data sheet:

**Company identification:** Saudi Chem  
**Address:** P.O. Box 70108  
Al Khobar 31952  
Kingdom of Saudi Arabia  
**Telephone:** +966 13 812 1166 | +966 13 847 6467  
**Fax:** +966 13 847 6985  
**Email:** solutions@saudichem.com

### SECTION 2: Hazards Identification

#### 2.1 Classification of the substance/mixture:

##### Classification according to (EC) Regulation 1272/2008

Acute toxicity (Category 4) **H332**  
Aspiration hazard (Category 1) **H304**  
Specific target organ toxicity (STOT) - repeated exposure (Category 2) **H373**  
Hazardous to the aquatic environment (Chronic Category 2) **H411**  
(See section 16 for full text of H-Statements)

##### Classification according to Directive 1999/45/EC

**Xn; R20**  
**Xn; R65**  
**Xn; R66**  
**N; R51/53**  
(See section 16 for the full text of R-Phrases)

#### 2.2 Label elements:

**Signal word:** Danger



#### Hazard statement(s):

**H332** Harmful if inhaled  
**H304** May be fatal if swallowed and enters airways  
**H373** May cause damage to organs through prolonged or repeated exposure  
**EUH066** Repeated exposure may cause skin dryness or cracking  
**H411** Toxic to aquatic life with long lasting effects

#### Precautionary statement(s):

**P261** Avoid breathing mist/vapours  
**P273** Avoid release to the environment.  
**P301 + P310** IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
**P331** Do NOT induce vomiting  
**P501** Dispose of contents/container in accordance w/ local/nat'l regulations

#### 2.3 Other hazards:

Possible effects to soil dwelling organisms

### SECTION 3: Composition/Information on Ingredients

#### 3.2 Mixtures:

Fatty acid derivative product and gas oil

#### Hazardous ingredient(s):

Ingredients	% by weight	CAS/EU number	Classification Directive 1999/45/EC	Classification Regulation (EC) 1272/2008
Fatty acid derivative reaction products	60-80		Not classified	Not classified

(See section 16 for the full text of R-Phrases and H-Statements)

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### SECTION 4:

#### First-aid Measures

#### 4.1 Description of first-aid measures:

- Inhalation:** Remove patient from exposure. Remove patient to fresh air, allow to rest and keep warm. Get medical attention if feeling unwell
- Ingestion:** Immediately rinse out mouth with water. Give sips of water. Do not induce vomiting. Provide rest and warmth. Get medical attention if feeling unwell
- Skin contact:** Immediately wash thoroughly with soap and water. Remove contaminated clothing. Get medical attention if skin appears damaged
- Eye contact:** Immediately flood the eye with plenty of water, holding the eye open. Get medical attention.

### SECTION 5:

#### Fire-fighting Measures

#### 5.1 Extinguishing media:

- Suitable:** Water mist, foam, carbon dioxide or dry powder
- Not suitable:** Water jet – will spread product

#### 5.2 Special hazards arising from the substance/mixture:

Fumes containing carbon dioxide, carbon monoxide, amine vapour and oxides of nitrogen may be formed in large fires

#### 5.3 Advice for fire-fighters:

Keep run-off water out of sewers and water sources. Self-contained breathing apparatus and full protective clothing must be worn

### SECTION 6:

#### Accidental Release Measures

#### 6.1 Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment (see section 8). Avoid contact with eyes and skin. Use with adequate ventilation

#### 6.2 Environmental precautions:

Prevent from entering the sewers or the immediate environment. In case of large spill, inform local police, local authority, water supplier, national rivers authority and/or fire brigade if appropriate

#### 6.3 methods and materials for containment and clean-up:

- On soil:** Contain any spilled material immediately onto a non-reactive absorbent material and remove to labelled containers for disposal (see section 13)
- On water:** None known

#### 6.4 Reference to other sections:

See section 8 for details of protective equipment  
See section 13 for details of disposal methods

### SECTION 7:

#### Handling and Storage

#### 7.1 Precautions for safe handling:

Keep away from heat. No smoking. Use personal protective equipment (see section 8). Ensure good ventilation during handling

#### 7.2 Conditions for safe storage, including any incompatibilities:

Store outdoors in a secure site. Keep in original containers

### SECTION 8:

#### Exposure Controls/ Personal Protection

#### 8.1 Control parameters:

No data available on mixture. Data provided is based on individual ingredient(s)

Occupational exposure levels for:	Value	Conclusion
Gas oils		Note: In this case the information in heading 8 is not required
Fatty acid derivative product		No data available

**Monitoring procedures:** None specified

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### 8.2 Exposure controls:

#### Personal protection:

Always check applicability with your supplier of protective equipment

#### Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as CEN (EU).

#### Eye Protection:

Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as EN166 (EU)

#### Skin protection:

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

#### Hand protection:

Wear gloves when handling the product. Contact your supplier of protective equipment for more details. Note: Break-through times can vary depending upon the thickness, use and source. Change gloves regularly. The selected protective gloves have to satisfy the standard of EN 374 (EU)

#### General hygiene:

Do not eat, drink or smoke while handling the product. Immediately take off any contaminated clothing and launder before re-use. Wash hands and/or face before breaks and at the end of the shift. After the session apply hand-cream to clean skin

### 9.1 Information on basic physical and chemical properties:

<b>Appearance:</b> (physical state, colour etc.)	Liquid, amber
<b>Odour:</b>	Hydrocarbon
<b>Odour threshold:</b>	Not determined
<b>pH:</b>	3 to 6
<b>Melting/freezing point:</b>	< -5°C
<b>Initial boiling point and boiling range:</b>	180 - 390°C
<b>Flash point:</b>	>60°C
<b>Evaporation rate:</b>	Not determined
<b>Flammability (solid, gas):</b>	Not determined
<b>Upper/lower flammability or explosive limits:</b>	Not determined
<b>Vapour pressure:</b>	Not determined
<b>Vapour density:</b>	Not determined
<b>Relative density at 20°C:</b>	0.88 to 0.92 gm/cc
<b>Solubility(ies):</b>	soluble in oil / insoluble in water
<b>Partition coefficient:</b>	Not determined
<b>Auto-ignition temp.:</b>	>250°C
<b>Decomposition temp.:</b>	Not determined
<b>Viscosity at 20°C:</b>	50 cps

### 9.2 Other data:

These are typical values and do not constitute a specification

### 10.1 Reactivity:

Stable under normal conditions and relevant use

### 10.2 Chemical stability:

Stable under normal conditions and relevant use

### 10.3 Possibility of hazardous reactions:

Stable under normal conditions and relevant use

## SECTION 9: Physical and Chemical Properties

## SECTION 10: Stability and Reactivity

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### 10.4 Conditions to avoid:

Heat, flames and sparks

### 10.5 Incompatible materials:

Oxidizing agents, Strong acids, Strong bases, Amines

### 10.6 Hazardous decomposition products:

None known

### 11.1 Information on toxicological effects:

No data available on mixture. Data provided is based on individual ingredient(s)

#### Acute toxicity:

Fatty acid derivative product No data available

#### Skin corrosion/irritation:

Causes skin irritation. Repeated exposure may cause skin dryness or cracking

#### Serious eye damage/irritation:

Causes mild eye irritation

#### Respiratory or skin sensitisation:

Not expected to cause respiratory or skin sensitisation

#### Germ cell mutagenicity:

Not expected to cause heritable genetic effects

#### Carcinogenicity:

Not expected to cause cancer

#### Reproductive toxicity:

Not expected to cause reproductive toxicity

#### STOT – single exposure:

Not expected to cause organ effects after a single exposure

#### STOT – repeated exposure:

May cause damage to organs through prolonged or repeated exposure. Dermal application at doses of 125 mg/kg, 5 d/wk, for 13 weeks resulted in decreased liver, thymus and spleen weights and altered bone marrow function. Microscopic alterations included liver hypertrophy and necrosis, decreased haematopoiesis and lymphocyte depletion

#### Aspiration hazard:

May be fatal if swallowed and enters airways

#### Symptoms relating to physical, chemical and toxicological characteristics:

While significant vapour concentrations are not likely, high concentrations can cause minor respiratory irritation, headache, drowsiness and dizziness, loss of co-ordination, disorientation and fatigue. Ingestion can cause irritation of the digestive tract, nausea, diarrhoea and vomiting.

#### Other information:

None known

### 12.1 Toxicity:

No data available on mixture. Data provided is based on individual ingredient(s)

Experimental studies of gas oils included in the mixture show that acute aquatic toxicity typically in the range LL50 65mg/L. over 96 hrs. These values are consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon compositions. They should be regarded as toxic to aquatic organisms, with the potential to cause long term adverse effects in the aquatic environment

### 12.2 Persistence and degradability:

None known

### 12.3 Bioaccumulative potential:

High potential for bioaccumulative

### 12.4 Mobility in soil:

Adsorption is the most predominant physical process on release to soil. Adsorbed hydrocarbons will slowly degrade in both soil and water.

## SECTION 11: Toxicological Information

## SECTION 12: Ecological Information

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### 12.5 Results of PBT and vPvB assessment:

No data available

### 12.6 Other adverse effects:

None anticipated

### 13.1 Waste treatment methods:

Dispose to licensed waste disposal site in accordance with local waste disposal authority regulations

Authority	14.1 UN number	14.2 Proper Shipping Name	14.3 Class or division	14.4 Packing group	14.5 Environmental hazard	Other information
ADR	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( fatty acid)	9	III	Yes	Transport Cat. 3 (Tunnel restriction code: E) EAC: ?3Z
IMDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( fatty acid)	9	III	Yes (Marine pollutant)	Stowage and segregation: Category A.
IATA	UN3082	Environmentally hazardous substance, liquid, n.o.s. ( fatty acid)	9	III	Yes	Pkg. Inst. 964 ERG Code: 9L

### 14.6 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:

No applicable

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

The provision of safety data sheets (SDS) comes under Regulation 6 of CHIP (CHIP is the recognised abbreviation for Chemicals Hazards Information and Packaging Regulations). This is in addition to The Health and Safety at Work Act 1974 in the United Kingdom

### 15.2 Chemical safety assessment:

Chemical safety assessment has not been carried out

### Sources of information used:

ECHA (European Chemicals Agency)  
HSE (Health and Safety Executive)  
EU-OSHA (European Agency for Safety and Health at Work)

### H-Statements used in this document:

**H304** May be fatal if swallowed and enters airways  
**H373** May cause damage to organs through prolonged or repeated exposure  
**EUH066** Repeated exposure may cause skin drying or cracking  
**H411** Toxic to aquatic life with long lasting effects  
**H332** Harmful if inhaled

### R-Phrases used in this document:

**Xn; R20** Harmful by inhalation  
**Xn; R65** Harmful: may cause lung damage if swallowed  
**N; R51/53** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment  
**Xn; R66;** Repeated exposure may cause skin dryness or cracking

Reasonable care has been taken in the preparation of this document to assess and summarise the hazard properties of the product(s), the user must still satisfy them-self that the information contained herein is pertinent to permit safe handling under their own use conditions, since we cannot foresee all conditions of use.

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## SECTION 13: Disposal Considerations

## SECTION 14: Transport Information

## SECTION 15: Regulatory Information

## SECTION 16: Other Information