

# Safety Data Sheet

IN FORCE LSRV

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Substance (UVCB)  
 Generic name : Fatty acids derivatives  
 C&L notification reference no : not applicable (REACH registered)

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

#### 1.2.1. Relevant identified uses

Main use category : Industrial use

#### 1.2.2. Uses advised against

No additional information available

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

Valence Drilling Fluids LLC  
 PO Box 7174  
 Edmond, OK 73083

Phone: (405) 285-6454  
 Website: www.valencedf.com

### 1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

| Country | Official advisory body                                     | Address | Emergency number                                                                                                                            | Comment |
|---------|------------------------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------|---------|
|         | World directory of poisons centres (Yellow Tox)<br>WHO-OMS | Website | <a href="http://www.who.int/gho/phe/chemical_safety/poisons_centres/en/">http://www.who.int/gho/phe/chemical_safety/poisons_centres/en/</a> |         |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

#### Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type : UVCB

| Name                    | Product identifier | %   |
|-------------------------|--------------------|-----|
| Fatty acids derivatives |                    | 100 |

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

|                                       |                                                                                                                                                                                                                                   |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| First-aid measures after inhalation   | : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.                                                                                                                                       |
| First-aid measures after skin contact | : Wash immediately with lots of water. Soap may be used. Take victim to a doctor if irritation persists.                                                                                                                          |
| First-aid measures after eye contact  | : Rinse immediately with plenty of water. Take victim to an ophthalmologist if irritation persists.                                                                                                                               |
| First-aid measures after ingestion    | : Rinse mouth with water. Call Poison Information Centre ( <a href="http://www.who.int/ipcs/poisons/centre/directory/en">www.who.int/ipcs/poisons/centre/directory/en</a> ). Consult a doctor/medical service if you feel unwell. |

#### 4.2. Most important symptoms and effects, both acute and delayed

|                                   |                                                    |
|-----------------------------------|----------------------------------------------------|
| Symptoms/effects                  | : No supplementary information available.          |
| Symptoms/effects after inhalation | : ON HEATING: Irritation of the respiratory tract. |

#### 4.3. Indication of any immediate medical attention and special treatment needed

No supplementary information available.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

|                                |                                                                                                                      |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Suitable extinguishing media   | : AFFF foam. BC powder. Carbon dioxide. Dry sand. Dry chemical powder. Adapt extinguishing media to the environment. |
| Unsuitable extinguishing media | : Solid water jet ineffective as extinguishing medium.                                                               |

#### 5.2. Special hazards arising from the substance or mixture

|                  |                                                                                                                                                         |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fire hazard      | : DIRECT FIRE HAZARD: Combustible. INDIRECT FIRE HAZARD: Heating increases the fire hazard. Temperature above flashpoint: higher fire/explosion hazard. |
| Explosion hazard | : DIRECT EXPLOSION HAZARD: Fine dust is explosive with air. INDIRECT EXPLOSION HAZARD: Dust cloud can be ignited by a spark.                            |

#### 5.3. Advice for firefighters

|                   |                                           |
|-------------------|-------------------------------------------|
| Other information | : No supplementary information available. |
|-------------------|-------------------------------------------|

### SECTION 6: Accidental release measures

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

|                  |                                                                                                                                                              |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General measures | : Mark the danger area. Exposure to heat: have neighbourhood close doors and windows. Exposure to fire/heat: consider evacuation. Wash contaminated clothes. |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|

##### 6.1.1. For non-emergency personnel

|                      |                                                          |
|----------------------|----------------------------------------------------------|
| Protective equipment | : See "Material-Handling" to select protective clothing. |
|----------------------|----------------------------------------------------------|

##### 6.1.2. For emergency responders

|                      |                                                |
|----------------------|------------------------------------------------|
| Protective equipment | : Use protective measures listed in Section 8. |
|----------------------|------------------------------------------------|

#### 6.2. Environmental precautions

Prevent soil and water pollution.

#### 6.3. Methods and material for containment and cleaning up

|                         |                                                                                                                                                                                                                                            |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For containment         | : Knock down/dilute dust cloud with water spray.                                                                                                                                                                                           |
| Methods for cleaning up | : Carefully collect the spill/leftovers. If melted: allow liquid to solidify before taking it up. Scoop solid spill into closing containers or into synthetic bags. Clean contaminated surfaces with an excess of water and soap solution. |
| Other information       | : No supplementary information available.                                                                                                                                                                                                  |

#### 6.4. Reference to other sections

Handle waste materials in accordance with the provisions of Section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

|                      |                                                         |
|----------------------|---------------------------------------------------------|
| Handling temperature | : $\geq 10\text{ }^{\circ}\text{C}$ above melting point |
|----------------------|---------------------------------------------------------|

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

|                              |                                                                                                                                      |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Information on mixed storage | : KEEP SUBSTANCE AWAY FROM: ignition sources. (strong) acids. (strong) bases.                                                        |
| Storage area                 | : Keep container in a well-ventilated place. Store at ambient temperature. Keep out of direct sunlight. Meet the legal requirements. |
| Special rules on packaging   | : SPECIAL REQUIREMENTS: closing. correctly labelled. meet the legal requirements.                                                    |

Packaging materials : SUITABLE MATERIAL: steel with plastic inner lining. stainless steel. aluminium.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Personal protective equipment:

Gloves. Protective clothing. Safety glasses.

#### Materials for protective clothing:

Good resistance: Nitrile rubber

#### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

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

|                                                 |                                     |
|-------------------------------------------------|-------------------------------------|
| Physical state                                  | : Liquid                            |
| Appearance (room temperature)                   | : Clear. Viscous.                   |
| Colour                                          | : Light yellow to dark yellow.      |
| Odour                                           | : Characteristic odour. Mild odour. |
| Odour threshold                                 | : No data available                 |
| pH                                              | : < 7                               |
| Relative evaporation rate (butylacetate=1)      | : No data available                 |
| Melting point                                   | : < 20 °C                           |
| Freezing point                                  | : No data available                 |
| Boiling point                                   | : > 250 °C                          |
| Flash point                                     | : > 150 °C (ASTM D92)               |
| Auto-ignition temperature                       | : > 300 °C                          |
| Decomposition temperature                       | : > Flash point                     |
| Flammability (solid, gas)                       | : No data available                 |
| Vapour pressure                                 | : < 0.01 hPa (20°C)                 |
| Relative vapour density at 20 °C                | : No data available                 |
| Relative density                                | : No data available                 |
| Density                                         | : ca. 0.95 g/cm <sup>3</sup> (25°C) |
| Solubility                                      | : Water: < 0.005 g/100ml (25°C)     |
| Partition coefficient n-octanol/water (Log Pow) | : > 5 (est.)                        |
| Viscosity, kinematic                            | : 8421.053 mm <sup>2</sup> /s       |
| Viscosity, dynamic                              | : > 8000 cP (25°C)                  |
| Explosive properties                            | : No data available                 |
| Oxidising properties                            | : No data available                 |
| Explosive limits                                | : No data available                 |

### 9.2. Other information

|                  |                                                                                    |
|------------------|------------------------------------------------------------------------------------|
| VOC content      | : < 0.1 % (1999/13/EC; 2004/42/EC; 2010/75/EU)                                     |
| Other properties | : Poorly soluble in water. Soluble in oils/fats. soluble in most organic solvents. |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

On burning: release of (carbon monoxide - carbon dioxide).

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

No supplementary information available.

### 10.5. Incompatible materials

No supplementary information available.

### 10.6. Hazardous decomposition products

No supplementary information available.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

#### Fatty acids derivatives

|               |                        |
|---------------|------------------------|
| LD50 oral rat | > 2000 mg/kg Non-toxic |
|---------------|------------------------|

|                           |                             |
|---------------------------|-----------------------------|
| Skin corrosion/irritation | : Not classified<br>pH: < 7 |
|---------------------------|-----------------------------|

|                               |                             |
|-------------------------------|-----------------------------|
| Serious eye damage/irritation | : Not classified<br>pH: < 7 |
|-------------------------------|-----------------------------|

|                                   |                  |
|-----------------------------------|------------------|
| Respiratory or skin sensitisation | : Not classified |
|-----------------------------------|------------------|

|                        |                  |
|------------------------|------------------|
| Germ cell mutagenicity | : Not classified |
|------------------------|------------------|

|                 |                  |
|-----------------|------------------|
| Carcinogenicity | : Not classified |
|-----------------|------------------|

|                       |                  |
|-----------------------|------------------|
| Reproductive toxicity | : Not classified |
|-----------------------|------------------|

|                      |                  |
|----------------------|------------------|
| STOT-single exposure | : Not classified |
|----------------------|------------------|

|                        |                  |
|------------------------|------------------|
| STOT-repeated exposure | : Not classified |
|------------------------|------------------|

|                   |                  |
|-------------------|------------------|
| Aspiration hazard | : Not classified |
|-------------------|------------------|

#### Fatty acids derivatives

|                      |                             |
|----------------------|-----------------------------|
| Viscosity, kinematic | 8421.053 mm <sup>2</sup> /s |
|----------------------|-----------------------------|

## SECTION 12: Ecological information

### 12.1. Toxicity

|                   |                                                     |
|-------------------|-----------------------------------------------------|
| Ecology - general | : According to literature: no environmental hazard. |
|-------------------|-----------------------------------------------------|

|               |                                           |
|---------------|-------------------------------------------|
| Ecology - air | : No supplementary information available. |
|---------------|-------------------------------------------|

|                 |                                     |
|-----------------|-------------------------------------|
| Ecology - water | : No bioaccumulation data available |
|-----------------|-------------------------------------|

|                                                          |                  |
|----------------------------------------------------------|------------------|
| Hazardous to the aquatic environment, short-term (acute) | : Not classified |
|----------------------------------------------------------|------------------|

|                                                           |                  |
|-----------------------------------------------------------|------------------|
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified |
|-----------------------------------------------------------|------------------|

### 12.2. Persistence and degradability

#### Fatty acids derivatives

|      |                                   |
|------|-----------------------------------|
| ThOD | 2.9 g O <sub>2</sub> /g substance |
|------|-----------------------------------|

### 12.3. Bioaccumulative potential

#### Fatty acids derivatives

|                                                 |            |
|-------------------------------------------------|------------|
| Partition coefficient n-octanol/water (Log Pow) | > 5 (est.) |
|-------------------------------------------------|------------|

### 12.4. Mobility in soil

#### Fatty acids derivatives

|                 |                     |
|-----------------|---------------------|
| Surface tension | ca. 0.03 N/m (20°C) |
|-----------------|---------------------|

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

|                                   |                                                                                                                                                                                                                                                                 |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Disposal                          | : Prevent dispersion by covering with dry absorbent,Scoop solid spill into closing containers,Scoop absorbed substance into closing containers,Clean contaminated surfaces with an excess of water and soap solution,Wash clothing and equipment after handling |
| Regional legislation (waste)      | : No supplementary information available.                                                                                                                                                                                                                       |
| Ecology - waste materials         | : Do not discharge into drains or the environment. Remove to an authorized waste treatment plant.                                                                                                                                                               |
| European List of Waste (LoW) code | : No supplementary information available                                                                                                                                                                                                                        |

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

| ADR                                     | IMDG           | IATA           | ADN            | RID            |
|-----------------------------------------|----------------|----------------|----------------|----------------|
| <b>14.1. UN number</b>                  |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| <b>14.2. UN proper shipping name</b>    |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| <b>14.3. Transport hazard class(es)</b> |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| <b>14.4. Packing group</b>              |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| <b>14.5. Environmental hazards</b>      |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| No supplementary information available  |                |                |                |                |

### 14.6. Special precautions for user

#### Overland transport

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

#### Inland waterway transport

Not applicable

#### Rail transport

Not applicable

## 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Fatty acids derivatives is not on the REACH Candidate List

Fatty acids derivatives is not on the REACH Annex XIV List

Fatty acids derivatives is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Fatty acids derivatives is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : < 0.1 % (1999/13/EC; 2004/42/EC; 2010/75/EU)

#### 15.1.2. National regulations

Chemical inventories : Compliant with AIC, DSL, EAEU, ECST, ENCS, EU REACH, IECSC, ISHL, KECL, NZIoC, PICCS, TECI, TSCA, VNCI

KKDIK number (Turkey) : all the ingredients of this product in the scope of KKDIK, if not exempted, have been (pre-)registered.

K-REACH (Korea) : preregistered

UK-REACH (Great Britain) : all the ingredients of this product in the scope of UK-REACH, if not exempted, have been notified.

Swiss ChemO (SR 813.11) : No supplementary information available

#### Germany

Regulatory reference : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 2363)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

#### Netherlands

ABM category : B(4) - low hazard for aquatic organisms

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

#### Switzerland

Storage class (LK) : LK 10/12 - Liquids

### 15.2. Chemical safety assessment

The chemical safety assessment has been carried out, an exposure scenario is not applicable (substance is not classified).

## SECTION 16: Other information

Training advice : No supplementary information available.

SDS changed sections : 15 - Regulatory information

SDS Reason for revision : No supplementary information available

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|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chem. inventories legend | : AIIC = Australian Inventory of Industrial Chemicals<br>DSL = Canadian Domestic Substances List<br>EAEU = Eurasian Economic Union Unified list of chemicals<br>ECST = Existing Chemical Substances Inventory of Taiwan<br>ENCS = Japanese Existing and New Chemicals Substances List<br>EU REACH = European Union REACH Regulation 1907/2006<br>IECSC = Inventory of Existing Chemicals Substances in China<br>ISHL = Japanese Industrial Safety and Health Law Substances<br>KECL = Korean Existing Chemical List<br>NZIoC = New Zealand Inventory of Chemicals<br>PICCS = Philippine Inventory of Chemicals and Chemical Substances<br>TECI = Thailand FDA Existing Chemicals Inventory<br>TSCA = USA Toxic Substances Control Act<br>VNCI = Vietnam National Chemicals Inventory |
| Other information        | : No supplementary information available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

#### SDS EU Oleon Annex II

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*