

Safety Data Sheet

HYDRASURF EX

Safety Data Sheet dated 1/6/2021, Provisional 1

Printing date:1/6/2021

1. IDENTIFICATION

Product identifier

Trade name: HYDRASURF EX

MSDS code: MD0164

Chemical description: Product based on ethoxylated esters in petroleum distillates.

Recommended use of the chemical and restrictions on use

Recommended use:

Industrial uses.

Restrictions on use:

Not known.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Supplier:

Valence Drilling Fluids LLC - P.O. Box 7174, Edmond, OK 73083- U.S.A. PH:

405-285-6454 FAX: 405-285-6434

Emergency phone number

CHEMTREC - Phone: +1 800 424 9300

2. HAZARD(S) IDENTIFICATION

Classification of the chemical

Following GHS and within the meaning of 29 CFR 1910.1200 (OSHA)

Warning, Flam. Liq. 4, Combustible liquid.

Label elements

Following GHS and within the meaning of 29 CFR 1910.1200 (OSHA)

Hazard pictograms:

None

Warning

Hazard statements:

H227 Combustible liquid.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

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

P370+P378 In case of fire: Use Water mist, Carbon dioxide (CO2), Foam, Chemical Powders to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

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P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:
 None

Ingredient(s) with unknown acute toxicity:
 None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:
 >= 60% - < 75% Distillates (petroleum), hydrotreated light
 Index number: 649-422-00-2, CAS: 64742-47-8, EC: 265-149-8



A.10/1 Asp. Tox. 1 H304

B.6/4 Flam. Liq. 4 H227

4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

None

Indication of immediate medical attention and special treatment needed

Treatment:

None

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

In case of fire: Use Water mist, Carbon dioxide (CO2), Foam, Chemical Powders to extinguish.

Unsuitable extinguishing media:

Do not use water-jets directly on the product.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products:

None

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Explosive properties: N.D.
 Oxidizing properties: N.D.
 Special protective equipment and precautions for fire-fighters
 Use suitable breathing apparatus .
 Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
 Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures
 Wear personal protection equipment.
 Remove persons to safety.
 See protective measures under point 7 and 8.
 Methods and materials for containment and cleaning up
 Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling
 Avoid contact with skin and eyes, inhalation of vapours and mists.
 Do not use on extensive surface areas in premises where there are occupants.
 Do not use empty container before they have been cleaned.
 Before making transfer operations, assure that there are not any incompatible material residuals in the containers.
 See also section 8 for recommended protective equipment.
 Advice on general occupational hygiene:
 Contaminated clothing should be changed before entering eating areas.
 Do not eat or drink while working.
 Conditions for safe storage, including any incompatibilities
 Always keep in a well ventilated place.
 Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
 Keep away from food, drink and feed.
 Incompatible materials:
 Avoid contact with combustible materials. The product could catch fire.
 Strong oxidizers
 Instructions as regards storage premises:
 Cool and adequately ventilated.
 Packaging suggested:
 Plastic drums
 Storage temperature:
 Store at ambient temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
 Distillates (petroleum), hydrotreated light

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DE - TRGS 900 (MAK) - TWA(8h): 140 mg/m³, 20 ppm

Appropriate engineering controls:

None

Individual protection measures

Eye protection:

Use close fitting safety glasses (ANSI Z87.1 or approved equivalent); don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin. Select approved equipment and suitable material

Protection for hands:

Chemical-resistant protective gloves. When prolonged or frequently repeated contact may occur, a glove is recommended to prevent contact.

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged, select NIOSH/MSHA approved equipment.

Thermal Hazards:

None

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Value	Method:	Notes:
Appearance and colour:	Liquid, yellow to dark amber	--	--
Odour:	Slight	--	--
Odour threshold:	N.D.	--	--
pH:	N.D.	--	--
Melting point / freezing point:	N.D.	--	--
Initial boiling point and boiling range:	>100C (>212F)	--	--
Solid/gas flammability:	N.D.	--	--
Upper/lower flammability or explosive limits:	N.D.	--	--
Vapour density:	N.D.	--	--
Flash point:	approx. 62C (144F)	--	--
Evaporation rate:	N.D.	--	--
Vapour pressure:	N.D.	--	--
Relative density:	0.79 - 0.89	--	--
Solubility in water:	Insoluble	--	--
Solubility in oil:	N.D.	--	--
Partition coefficient (n-octanol/water):	N.D.	--	--
Auto-ignition temperature:	N.D.	--	--

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Decomposition temperature:	N.D.	--	--
Viscosity:	>20.5 cSt at 40C	--	--
Miscibility:	N.D.	--	--
Fat Solubility:	N.D.	--	--
Conductivity:	N.D.	--	--
Substance Groups relevant properties	N.D.	--	--

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Stable under normal conditions

Possibility of hazardous reactions

Stable under normal conditions

Conditions to avoid

Stable under normal conditions.

Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

Strong oxidizers

Hazardous decomposition products

Not known.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

N.D.

Toxicological information of the product:

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

Toxicity Oral Rat LD50 >2000 mg/kg - source: Based on components.

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

Irritation Skin : Repeated and prolonged contacts may cause slight irritation.

c) serious eye damage/irritation

Not classified

Based on available data, the classification criteria are not met

Irritation Eye : Repeated and prolonged contacts may cause slight irritation.

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

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Not classified
Based on available data, the classification criteria are not met

f) carcinogenicity
Not classified
Based on available data, the classification criteria are not met

g) reproductive toxicity
Not classified
Based on available data, the classification criteria are not met

h) STOT-single exposure
Not classified
Based on available data, the classification criteria are not met

i) STOT-repeated exposure
Not classified
Based on available data, the classification criteria are not met

j) aspiration hazard
Not classified
Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:
Distillates (petroleum), hydrotreated light - CAS: 64742-47-8

a) acute toxicity:
Toxicity Oral Rat LD50 > 5000 mg/kg - source: Literature data.
Toxicity Inhalation Rat LC50 > 5.28 mg/l - Duration: 4h - source: Literature data.
Toxicity Skin Rabbit LD50 > 2000 mg/kg - Duration: 24h - source: Literature data.

b) skin corrosion/irritation:
EPA Guideline Skin Rabbit : Irritant. - Duration: 24h - source: Literature data.

c) serious eye damage/irritation:
EPA OTS: 798.4500 Eye Rabbit : Not irritant. - source: Literature data.

d) respiratory or skin sensitisation:
EPA Guideline Skin Guinea pig : Not sensitizing. - source: Literature data.

e) germ cell mutagenicity:
Mutagenesis Rat : Not mutagenic. - source: Literature data.

f) carcinogenicity:
Carcinogeneticity Skin Mouse Negative - Duration: > 90 days. - source: Literature data.

g) reproductive toxicity:
Reproductive Toxicity Oral Rat NOAEL > 3000 mg/kg - Duration: 90 days - source: Literature data. - Notes: Related to male.
Reproductive Toxicity Oral Rat NOAEL > 1500 mg/kg - Duration: > 90 days. - source: Literature data. - Notes: Related to female.

Substance(s) listed on the NTP report on Carcinogens:
None.

Substance(s) listed on the IARC Monographs:
None.

Substance(s) listed as OSHA Carcinogen(s):
None.

Substance(s) listed as NIOSH Carcinogen(s):
None.

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12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecological information of the mixture:

a) Aquatic acute toxicity:

Data not available.

Ecological information of the main substances found in the mixture:

Distillates (petroleum), hydrotreated light

a) Aquatic acute toxicity:

OECD 203 Fish LL50 > 2 mg/l - Duration h: 96 - Notes: Literature data.

OECD 202 Daphnia magna EL50 = 1.4 mg/l - Duration h: 48 - Notes: Literature data.

OECD 201 Algae EL50 = 1-3 mg/l - Duration h: 72 - Notes: Literature data.

b) Aquatic chronic toxicity:

Fish NOEL = 0.098 mg/l - Duration h: 672 - Notes: By analogy to product with similar composition.

OECD 211 Daphnia magna EL50 = 0.81 mg/l - Duration h: 504 - Notes: Literature data.

c) Bacteria toxicity:

Bacteria LL50 = 677.9 mg/l - Duration h: 72 - Notes: By analogy to product with similar composition.

Persistence and degradability

Ecological information of the mixture:

Biodegradability: Data not available.

Ecological information of the main substances found in the mixture:

Distillates (petroleum), hydrotreated light

Biodegradability: Non-readily biodegradable - Test: OECD 301 F - Duration: 28 days: 58.6% - Notes: Literature data.

Bioaccumulative potential

Ecological information of the mixture:

Bioaccumulation: Data not available

Ecological information of the main substances found in the mixture:

Distillates (petroleum), hydrotreated light

Bioaccumulation: Bioaccumulative - Test: BCF - Bioconcentration factor 150-57000 - Notes: Calculated data (in silico).

Mobility in soil

Ecological information of the mixture:

Mobility in soil: Data not available

Distillates (petroleum), hydrotreated light

Mobility in soil: Very high - Test: Koc: 2.9-4.6 - Notes: Calculated data.

Other adverse effects

None

Use according to criteria of good industrial practice, avoiding product dispersion in the environment.

13. DISPOSAL CONSIDERATIONS

Waste treatment and disposal methods

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If possible recover the product, otherwise dispose of in authorized landfill or incineration in accordance with local regulation.

14. TRANSPORT INFORMATION

- 14.1. UN number
- | | |
|----------------------------------|--------|
| ADR-UN Number: | N.A. |
| DOT (non-bulk) number: | N.A. |
| DOT (bulk > 119 gallons) number: | NA1993 |
| IATA-UN Number: | N.A. |
| IMDG-UN Number: | N.A. |
- 14.2. UN proper shipping name
- | | |
|---|--|
| ADR-Shipping Name: | Not Regulated |
| DOT (non-bulk)-Shipping Name: | Not Regulated |
| DOT (bulk > 119 gallons)-Shipping Name: | Combustible liquid, n.o.s. (Distillates (petroleum), hydrotreated light) |
| IATA-Shipping Name: | Not Regulated |
| IMDG-Shipping Name: | Not Regulated |
- 14.3. Transport hazard class(es)
- | | |
|-------------------------------------|---------------|
| ADR-Class: | - |
| DOT Hazard Class: | - |
| ADR - Hazard identification number: | - |
| IATA-Class: | - |
| IATA-Label: | - |
| IMDG-Class: | - |
| Sea (IMO/IMDG): | Not Regulated |
- 14.4. Packing group
- | | |
|---------------------|-----|
| ADR-Packing Group: | - |
| DOT Packing group: | III |
| IATA-Packing group: | - |
| IMDG-Packing group: | - |
- 14.5. Environmental hazards
- | | |
|------------------------------|----|
| ADR-Environmental Pollutant: | No |
| IMDG-Marine pollutant: | No |
- 14.6. Special precautions for user
- | | |
|---|-------------------|
| DOT Special provisions: | 148, IB3, T1, TP1 |
| ADR-Subsidiary hazards: | - |
| ADR-S.P.: | - |
| ADR-Transport category (Tunnel restriction code): | - |
| IATA-Passenger Aircraft: | - |
| IATA-Subsidiary hazards: | - |
| IATA-Cargo Aircraft: | - |
| IATA-S.P.: | - |
| IATA-ERG: | - |
| IMDG-EmS: | - |
| IMDG-Subsidiary hazards: | - |
| IMDG-Stowage and handling: | - |

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IMDG-Segregation: -
 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
 N.A.

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory: all the components are listed on the TSCA inventory.

TSCA listed substances:

Distillates (petroleum), hydrotreated light is listed in TSCA Section 8b.

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances: no substances listed.

Section 304 - Hazardous substances: no substances listed.

Section 313 - Toxic chemical list: no substances listed.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

No substances listed.

CAA - Clean Air Act

CAA listed substances:

None.

CWA - Clean Water Act

CWA listed substances:

None.

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

None.

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

No substances listed.

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

No substances listed.

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

No substances listed.

Regulatory information USA:

HMIS INFORMATION

HEALTH

1

FLAMMABILITY

2

REACTIVITY

1

PERSONAL PROT. C

HAZARD INDEX: 4 = SEVERE

3 = SERIOUS

2 = MODERATE

1 = SLIGHT

0 = MINIMAL

C: Safety glasses, gloves, chemical apron

*: Chronic effects - See Section 11.

Sara Title III Section 311/312:

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Fire Hazard
 State regulations:
 Canadian Regulations: All the ingredients as such or as chemical group are registered in DSL.
 Canadian WHMIS:
 B3 (Combustible liquid)

16. OTHER INFORMATION

N.A.:Not Applicable
 N.D.:No Data available
 Full text of phrases referred to in Section 3:
 H304 May be fatal if swallowed and enters airways.
 H227 Combustible liquid.

Disclaimer:
 The product must be stored, handled and used according to criteria of good industrial practice and to regulations in force. This leaflet is offered for your consideration and guidance only. This leaflet complements the Technical Data Sheet but does not replace it. The information herein contained is given to the best of our knowledge at the time of issue.
 Due to the several ways in which the product may be used and the possible interaction with variables not depending on or unknown to the supplier, we also cannot accept any liability whatsoever for any loss or damage however arising from the handling and use of our products.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.

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LD50:	Lethal dose, for 50 percent of test population.
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average