www.nugentec.com/oilfield



Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 11/01/2015 Reviewed on 11/01/2015

1 Identification

- · Product Identifier
- · Trade name: NuFlo DR17
- · Product Number: NGTOF NF DR17
- Relevant identified uses of the substance or mixture and uses advised against:

No further relevant information available.

- · Product Description PC35 Washing and cleaning products (including solvent based products)
- · Application of the substance / the mixture: Specialty solvent
- · Details of the Supplier of the Safety Data Sheet:
- Manufacturer/Supplier:

NuGenTec Oilfield Chemicals

1155 Park Avenue, Emeryville, CA 94608

ofcadmin@nugentec.com

888-996-8436 or 707-891-3012 for product information

Emergency telephone number:

PERS Emergency Response: Domestic and Canada - 1-800-633-8253, International 1-801-629-0667

2 Hazard(s) Identification

· Classification of the substance or mixture:

Eye Irrit. 2B H320 Causes eye irritation. Aquatic Acute 2 H401 Toxic to aquatic life.

Aquatic Chronic 4 H413 May cause long lasting harmful effects to aquatic life.

- · Label elements:
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms: Non-Regulated Material
- Signal word: Warning
- · Hazard statements:

Causes eye irritation.

Toxic to aquatic life.

May cause long lasting harmful effects to aquatic life.

· Precautionary statements:

Avoid release to the environment.

Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Unknown acute toxicity:

6 % of the mixture consists of component(s) of unknown toxicity.

- · Classification system: NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
- · NFPA ratings (scale 0 4)



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· HMIS-ratings (scale 0 - 4)



· Hazard(s) not otherwise classified (HNOC): None known

3 Composition/Information on Ingredients

Proprietary 40-60%

- · Chemical characterization: Substance
- · CAS No. Description

90989-38-1 Aromatic hydrocarbons, C8

- Identification number(s)
- · **EC number:** 292-694-9
- · Index number: 648-010-00-X
- · Chemical characterization: Mixtures
- · Description: Mixture of substances listed below with non-hazardous additions.

| · Dangerous Components: | | | | | |
|-----------------------------------|--------------------|--|--------|--|--|
| CAS: 57-55-6 RTECS: TY 2000000 | Propylene Glycol | | 25-50% | | |
| CAS: 84133-50-6 | Alcohol Ethoxylate | Aquatic Acute 1, H400; Aquatic Chronic 1, H410 | 2-12% | | |

* 4 First-Aid Measures

- · Description of first aid measures:
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact:

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If swallowed and symptoms occur, consult a doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed: No further relevant information available.
- Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

5 Fire-Fighting Measures

- · Extinguishing media:
- Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture: No further relevant information available.
- · Advice for firefighters:
- · Protective equipment:

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures: Not required.
- · Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

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· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the collected material according to regulations.

Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and Storage

- · Handling
- · Precautions for safe handling: No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities:
- · Storage
- Requirements to be met by storerooms and receptacles: Store in the original container.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: No further relevant information available...
- · Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters:
- · Components with occupational exposure limits:

57-55-6 Propylene Glycol

WEEL Long-term value: 10 mg/m³

- · Additional information: The lists that were valid during the creation of this SDS were used as basis.
- · Exposure controls:
- Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

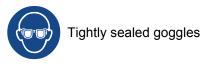
Avoid contact with the eyes.

Avoid contact with the eves and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure, use respiratory protective device that is independent of circulating air.

- · **Protection of hands:** Not required.
- · Material of gloves: Not required.
- · Penetration time of glove material: Not applicable.
- Eye protection:



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9 Physical and Chemical Properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Liquid Color: Whitish

· Odor: Product specific · Odor threshold: Not determined.

7 · pH-value @ 20 °C (68 °F):

· Change in condition

Melting point/Melting range:

121 °C (250 °F) Boiling point/Boiling range:

· Flash point: > 93 °C (> 199 °F)

Flammability (solid, gaseous): Not applicable. · Ignition temperature: 371 °C (700 °F) Decomposition temperature: Not determined.

· Auto igniting: Product is not self-igniting.

Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: 2.6 Vol % 12.6 Vol % Upper:

· Vapor pressure @ 20 °C (68 °F): 0.1 hPa

Density @ 20 °C (68 °F): 0.851 g/cm³ (7.102 lbs/gal)

Relative density: Not determined. · Vapor density: Not determined. Not determined. · Evaporation rate:

· Solubility in / Miscibility with:

Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic @ 20 °C (68 °F): 90 mPas Kinematic: Not determined.

· Solvent content:

Organic solvents: 39.0 % VOC content: 39.0 % Solids content: 55.0 %

Other information: No further relevant information available.

10 Stability and Reactivity

- · Reactivity: No further relevant information available.
- · Chemical stability: Stable under normal conditions.
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

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- · Possibility of hazardous reactions: No dangerous reactions known.
- · Conditions to avoid: No further relevant information available.
- · Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological Information

- · Information on toxicological effects:
- · Acute toxicity:

| LD/LC50 values that are relevant for classification: | | | | | |
|--|----------------|-------------------------|--|--|--|
| 57-55-6 P | ropylene Glyco | I | | | |
| Oral | LD50 | 20000 mg/kg (rat) | | | |
| Dermal | LD50 | 20800 mg/kg (rabbit) | | | |
| Inhalative | LC50/96 hours | 52930 mg/l (Pimephales) | | | |
| | Intravenous | 6630 mg/kg (mouse) | | | |
| | | 6423 mg/kg (rat) | | | |
| | | 6500 mg/kg (rabbit) | | | |

- · Primary irritant effect:
- · On the skin: No irritating effect.
- · On the eye: Irritating effect.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

İrritant

- Carcinogenic categories:
- IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

* 12 Ecological Information

- · Toxicity:
- · Aquatic toxicity:

Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

57-55-6 Propylene Glycol

EC50 >10000 mg/l (daphnia)

- · Persistence and degradability: No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential: No further relevant information available.
- · Mobility in soil: No further relevant information available.
- · Additional ecological information:
- · General notes:

Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

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- · Results of PBT and vPvB assessment:
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects: No further relevant information available.

13 Disposal Considerations

- · Waste treatment methods:
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Observe all federal, state and local environmental regulations when disposing of this material.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

* 14 Transport Information

· UN-Number:

· **DOT, IMDG** Non-Regulated Material

· ADR, IATA UN3082

· **UN proper shipping name:** Not Regulated for Transportation

DOT, IMDG Non-Regulated Material

· ADR UN3082 Environmentally hazardous substances, liquid, n.o.s.

(Alcohol Ethoxylate)

· IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Alcohol Ethoxylate)

· Transport hazard class(es):

· DOT, IMDG

· Class: Non-Regulated Material

· ADR



· Class: 9 (M6) Miscellaneous dangerous substances and articles

· Label:

· IATA



• Class: 9 Miscellaneous dangerous substances and articles

· Label:

· Packing group:

· **DOT, IMDG** Non-Regulated Material

· ADR, IATA

· Environmental hazards:

Special marking (ADR):
 Special marking (IATA):
 Symbol (fish and tree)

Special precautions for user: Warning: Miscellaneous dangerous substances and articles

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Danger code (Kemler): 90
Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code: Not applicable.

· Transport/Additional information:

· ADR

· Excepted quantities (EQ): Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

· UN "Model Regulation": UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCES,

LIQUID, N.O.S. (ALCOHOL ETHOXYLATE), 9, III

* 15 Regulatory Information

- Safety, health and environmental regulations/legislation specific for the substance or mixture:
- · SARA (Superfund Amendments and Reauthorization):
- Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act):

57-55-6 Propylene Glycol

84133-50-6 Alcohol Ethoxylate

- · California Proposition 65:
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

- · Carcinogenic categories:
- · EPA (Environmental Protection Agency):

None of the ingredients are listed.

· TLV (Threshold Limit Value established by ACGIH):

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms: Non-Regulated Material
- · Signal word: Warning
- Hazard statements:

Causes eye irritation.

Toxic to aquatic life.



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May cause long lasting harmful effects to aquatic life.

· Precautionary statements:

Avoid release to the environment.

Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations:

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

| State Right to Know: | | | | | |
|-----------------------------------|--------------------|--|--------|--|--|
| | Proprietary | | 40-60% | | |
| CAS: 57-55-6 RTECS: TY 2000000 | Propylene Glycol | | 25-50% | | |
| CAS: 84133-50-6 | Alcohol Ethoxylate | ♦ Aquatic Acute 1, H400; Aquatic Chronic 1, H410 | 2-12% | | |
| All ingredients are listed. | | | | | |

[·] Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

* 16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- · Date of preparation / last revision: 11/01/2015 / 17
- · Abbreviations and acronyms:

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - AcuteHazard, Category 2
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Aquatic Chronic 4: Hazardous to the aquatic environment - Chronic Hazard, Category 4

* Data compared to the previous version altered.

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