

Safety Data Sheet (SDS)

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

Issue date 02/17/2016

Reviewed on 02/17/2016

* 1 Identification

· **Product Identifier**

· **Trade name: NuFlo 151**

· **Product Number:** ofc-NG51a

· **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:** 100% Biodegradable paraffin and asphaltene dispersant

· **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

www.nugentec.com/oilfield

· **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:**



GHS07

Acute Tox. 4 H312 Harmful in contact with skin.

Flam. Liq. 4 H227 Combustible liquid.

· **Hazard description:** Mild

· **Information concerning particular hazards for human and environment:**

The product has to be labeled due to the calculation procedure of international guidelines.

· **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **Label elements:**

· **GHS label elements**

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

· **Hazard pictograms:**



GHS07

· **Signal word:** Warning

· **Hazard-determining components of labeling:**

Glycol ether

· **Hazard statements:**

H227 Combustible liquid.

H312 Harmful in contact with skin.

· **Precautionary statements:**

P210 Keep away from flames and hot surfaces. – No smoking.

P280 Wear protective gloves / eye protection / face protection.

P280 Wear protective gloves / protective clothing.

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- P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
- P312 Call a POISON CENTER/doctor if you feel unwell.
- P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
- P302+P352 IF ON SKIN: Wash with plenty of water.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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



- **HMIS-ratings (scale 0 - 4)**



- **Hazard(s) not otherwise classified (HNOC):** None known

* 3 Composition/Information on Ingredients

- **Non-hazardous components:**

Non-Hazardous Coupling Agents	2-12%
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- **Chemical characterization: Mixtures**

- **Description:** Mixture of substances listed below with non-hazardous additions.

- **Dangerous Components:**

	Solvent naphtha (petroleum), medium aliph. ☒ Xn R65 ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304	25-50%
	Heavy naphtha distillates ☒ Xn R65 ⚠ Asp. Tox. 1, H304	25-50%
	Glycol ether ☠ T R24 ⚠ Acute Tox. 3, H311; Flam. Liq. 4, H227	5-10%
	Mixture of surfactants ☒ Xn R22 ⚠ Acute Tox. 4, H302	2-12%
65997-01-5	Corrosion Inhibitor ☒ Xn R20/22 R52 ⚠ Acute Tox. 4, H332; Aquatic Acute 3, H402	≤ 2.5%

* 4 First-Aid Measures

- **Description of first aid measures:**

- **General information:**

Symptoms of poisoning may occur after exposure to dust, fumes or particulates; seek medical attention if feeling unwell.

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· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Generally the product does not irritate the skin.

· **After eye contact:** Rinse opened eye for several minutes under running water.

· **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:**

Combustible liquid. Vapors can travel to a source of ignition and flash back.

Explosive mixtures may occur at temperatures at or above flashpoint.

· **Advice for firefighters:**

· **Protective equipment:**

Mouth respiratory protective device.

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

· **Methods and material for containment and cleaning up:**

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

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

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:**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· **Information about protection against explosions and fires:** Protect from heat.

· **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:**

Keep receptacle tightly sealed.

Protect from heat and direct sunlight.

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- **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:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **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.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes 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:**



Protective gloves

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



Goggles recommended during refilling.

*** 9 Physical and Chemical Properties**

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Liquid
Color:	Clear to light yellow
- **Odor:** Mild
- **Odor threshold:** Not determined.
- **pH-value @ 20 °C (68 °F):** 7.8
- **Change in condition**

Melting point/Melting range:	--
Boiling point/Boiling range:	150 °C (302 °F)
- **Pour point** -37 °C (-35 °F) (ASTM D97)
- **Solidification point:**

Pouring point	-37 C
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- **Flash point:** 66 °C (151 °F)
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** 265 °C (509 °F)
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Not determined.
- **Explosion limits:**
 - Lower:** 0.6 Vol %
 - Upper:** 6.5 Vol %
- **Vapor pressure @ 20 °C (68 °F):** 6.6 hPa (5 mm Hg)
- **Density @ 20 °C (68 °F):** 0.851 g/cm³ (7.102 lbs/gal)
- **Relative density:** Not determined.
- **Vapor density:** Not determined.
- **Evaporation rate:** Not determined.
- **Solubility in / Miscibility with:**
 - Water:** Not miscible or difficult to mix.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic @ 20 °C (68 °F):** 1 mPas
 - Kinematic:** Not determined.
- **Solvent content:**
 - Organic solvents:** 40.0 %
 - VOC content:** 40.0 %
- **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.
- **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:		
Solvent naphtha (petroleum), medium aliph.		
Oral	LD50	>6500 mg/kg (rat)
Dermal	LD50	>3000 mg/kg (rab)
Inhalative	LC50/4 h	>14 mg/l (rat)
	LC50/48 hrs	800 mg/l (daphnia)

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Heavy naphtha distillates		
Dermal	LD50	>2000 mg/kg (rabbit)
Glycol ether		
Dermal	LD50	530-3000 mg/kg (rat)
Mixture of surfactants		
Oral	LD50	1400 mg/kg (rat)
65997-01-5 Corrosion Inhibitor		
Oral	LD50	5000 mg/kg (rat)
Inhalative	LC50/96 hours	20 mg/l (Zebra fish)

· **Primary irritant effect:**

· **On the skin:** No irritating effect.

· **On the eye:** No irritating effect.

· **Additional toxicological information:**

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

· **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:**

Heavy naphtha distillates

EC50 41 mg/l (Fathead Minnow)

Glycol ether

EC50 2000 mg/l (Fathead Minnow)

Mixture of surfactants

EC50 5.5 mg/l (Fathead Minnow)

· **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 product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

· **Results of PBT and vPvB assessment:**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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- **Other adverse effects:** No further relevant information available.

* 13 Disposal Considerations

- **Waste treatment methods:**
- **Recommendation:** 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, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name:**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class:** Non-Regulated Material
- **Packing group:**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

* 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):**

	Solvent naphtha (petroleum), medium aliph.
	Heavy naphtha distillates
	Glycol ether
	Mixture of surfactants
65997-01-5	Corrosion Inhibitor

· **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.

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· Chemicals known to cause developmental toxicity:
None of the ingredients are listed.
· New Jersey Right-to-Know List:
None of the ingredients are listed.
· New Jersey Special Hazardous Substance List:
None of the ingredients are listed.
· Pennsylvania Special Hazardous Substance List:
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:**



GHS07

· **Signal word:** Warning

· **Hazard-determining components of labeling:**

Glycol ether

· **Hazard statements:**

H227 Combustible liquid.

H312 Harmful in contact with skin.

· **Precautionary statements:**

P210 Keep away from flames and hot surfaces. – No smoking.

P280 Wear protective gloves / eye protection / face protection.

P280 Wear protective gloves / protective clothing.

P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

P312 Call a POISON CENTER/doctor if you feel unwell.

P370+P378 In case of fire: Use for extinction: CO₂, powder or water spray.

P302+P352 IF ON SKIN: Wash with plenty of water.

P362+P364 Take off contaminated clothing and wash it before reuse.

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

P501 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.

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

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* 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:** 02/17/2016 / 25

· **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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Flam. Liq. 4: Flammable liquids, Hazard Category 4

Acute Tox. 4: Acute toxicity, Hazard Category 4

Acute Tox. 3: Acute toxicity, Hazard Category 3

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

Aquatic Acute 3: Hazardous to the aquatic environment - AcuteHazard, Category 3

· *** Data compared to the previous version altered.**

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