

Safety Data Sheet (SDS)

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

Issue date 05/07/2017

Reviewed on 05/07/2017

1 Identification

- **Product Identifier**

- **Trade name:** NuFlo Descale 730

- **Product Number:** ofc-nf730

- **Relevant identified uses of the substance or mixture and uses advised against:**

Descaling solution for Calcium Carbonate.

- **Product Description** Descaling solution for Calcium Carbonate.

- **Application of the substance / the mixture:**

Descaling solution for Iron, Copper, Manganese, Calcium, Magnesium and Zinc metal complexes and scales.

- **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:**



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- **Label elements:**

- **GHS label elements**

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

- **Hazard pictograms:**



GHS05 GHS07

- **Signal word:** Danger

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

Proprietary

Sodium Hydroxide

- **Hazard statements:**

H302 Harmful if swallowed.

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H314 Causes severe skin burns and eye damage.

Precautionary statements:

- P260 Do not breathe dusts or mists.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER/doctor.
- P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
- P363 Wash contaminated clothing before reuse.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Unknown acute toxicity:

This value refers to knowledge of known, established toxicological or ecotoxicological values.

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

Chemical characterization: Mixtures

Description: Mixture: consisting of the following components.

Dangerous Components:

	Proprietary	☠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	25-50%
1310-73-2	Sodium Hydroxide	☠ Skin Corr. 1A, H314	5-10%

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Trade name: NuFlo Descale 730**· Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

4 First-Aid Measures

· Description of first aid measures:

· General information: Immediately remove any clothing soiled by the product.

· After inhalation:

Generally the product does not irritate with 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:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation occurs, consult a doctor.

· After eye contact:

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.

If easy to do so, remove contact lenses if worn.

Seek immediate medical advice.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting without medical advice.

If vomiting does occur, repeat fluid administration

Seek immediate medical advice.

· 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: Use fire fighting measures that suit the environment.

· Special hazards arising from the substance or mixture:

If incinerated, product will release the following toxic fumes: Oxides of Carbon, Nitrogen (NO_x) and Sodium.

· 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:

Wear protective equipment. Keep unprotected persons away.

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- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
 Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
 Use neutralizing agent.
 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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

	Proprietary	75 mg/m3
1310-73-2	Sodium Hydroxide	0.5 mg/m3
2836-32-0	Sodium Glycolate	5.1 ppm

· **PAC-2:**

	Proprietary	830 mg/m3
1310-73-2	Sodium Hydroxide	5 mg/m3
2836-32-0	Sodium Glycolate	56 ppm

· **PAC-3:**

	Proprietary	5,000 mg/m3
1310-73-2	Sodium Hydroxide	50 mg/m3
2836-32-0	Sodium Glycolate	350 ppm

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:** No special measures required.
- **Conditions for safe storage, including any incompatibilities:**
 Store away from strong acids, strong oxidizing agents, strong reducing agents, reactive metals (Zinc & Aluminum) and their alloys (Brass, etc.), Copper, Copper alloys and galvanized surfaces.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

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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 following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
 At this time, the remaining constituent has no known exposure limits.*

1310-73-2 Sodium Hydroxide

PEL	Long-term value: 2 mg/m ³
REL	Ceiling limit value: 2 mg/m ³
TLV	Ceiling limit value: 2 mg/m ³

- **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 and skin.*
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Eye protection:**



Tightly sealed goggles

- **Body protection:**



Protective work clothing

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9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Liquid
Color:	Light yellow
Odor:	Mild
Odor threshold:	Not determined.

- **pH-value @ 20 °C (68 °F):** 12.5

- **Change in condition**

Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	100 °C (212 °F)

- **Flash point:** None

- **Flammability (solid, gaseous):** Product is not flammable.

- **Ignition temperature:** Not applicable

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not self-igniting.

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

- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

- **Vapor pressure @ 20 °C (68 °F):** 23 hPa (17 mm Hg)

- **Density @ 20 °C (68 °F):** 1.328 g/cm³ (11.082 lbs/gal)

- **Relative density:** Not determined.

- **Vapor density:** Not determined.

- **Evaporation rate:** Not determined.

- **Solubility in / Miscibility with:**

Water:	Fully miscible.
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- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**

Dynamic:	Not determined.
Kinematic:	Not determined.

- **Solvent content:**

Organic solvents:	0.0 %
Water:	51.6 %

Solids content:	43.4 %
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- **Other information:** No further relevant information available.

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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:**
Strong acids, strong oxidizing agents, strong reducing agents, reactive metals (Zinc & Aluminum) and galvanized surfaces.
- **Hazardous decomposition products:** Carbon Oxides, Nitrogen Oxides (NOx), and Sodium Oxides.

11 Toxicological Information

- **Information on toxicological effects:**
 - **Acute toxicity:**
- | | | |
|---|------|----------------------|
| · LD/LC50 values that are relevant for classification: | | |
| Proprietary | | |
| Oral | LD50 | 630-1260 mg/kg (Rat) |
| 1310-73-2 Sodium Hydroxide | | |
| Oral | LD50 | 2000 mg/kg (Rat) |
- **Primary irritant effect:**
 - **On the skin:** Strong caustic effect on skin and mucous membranes.
 - **On the eye:**
Strong irritant with the danger of severe eye injury.
Corrosive effect.
 - **Additional toxicological information:**
Swallowing will lead to a corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.
 - **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. |

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12 Ecological Information

· **Toxicity:**

· **Aquatic toxicity:**

1310-73-2 Sodium Hydroxide

EC50 40 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:**

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

· **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.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport Information

· **UN-Number:**

· **DOT, ADR/ADN, IMDG, IATA**

UN3266

· **UN proper shipping name:**

· **DOT**

Corrosive liquid, basic, inorganic, n.o.s. (Sodium Hydroxide)

· **ADR/ADN**

UN3266 Corrosive liquid, basic, inorganic, n.o.s. (Sodium Hydroxide)

· **IMDG, IATA**

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium Hydroxide)

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Trade name: NuFlo Descale 730

· **Transport hazard class(es):**

· **DOT**



- **Class:** 8 Corrosive substances
- **Label:** 8

· **ADR/ADN**



- **Class:** 8 (C5) Corrosive substances
- **Label:** 8

· **IMDG, IATA**



- **Class:** 8 Corrosive substances
- **Label:** 8
- **Packing group:** III
- **DOT, ADR/ADN, IMDG, IATA** III
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Warning: Corrosive substances
- **Danger code (Kemler):** 80
- **EMS Number:** F-A,S-B
- **Segregation groups:** Alkalis
- **Stowage Category** B
- **Stowage Code** SW2 Clear of living quarters.
- **Segregation Code** SG35 Stow "separated from" acids.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.

· **ADR/ADN**

- **Excepted quantities (EQ):** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

· **IMDG**

- **Limited quantities (LQ):** 0
- **Excepted quantities (EQ):** Code: E0
Not permitted as Excepted Quantity

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· **UN "Model Regulation":** UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE), 8, 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):**

All ingredients are listed or exempt from listing.

- **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.

- **New Jersey Right-to-Know List:**

1310-73-2 Sodium Hydroxide

- **New Jersey Special Hazardous Substance List:**

1310-73-2 Sodium Hydroxide CO, R1

- **Pennsylvania Right-to-Know List:**

1310-73-2 Sodium Hydroxide

- **Pennsylvania Special Hazardous Substance List:**

1310-73-2 Sodium Hydroxide E

- **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).

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· **Hazard pictograms:**



GHS05 GHS07

· **Signal word:** Danger

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

Proprietary
Sodium Hydroxide

· **Hazard statements:**

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

· **Precautionary statements:**

P260 Do not breathe dusts or mists.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
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.

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:** 05/07/2017 / 1

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· **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)*

HMS: *Hazardous Materials Identification System (USA)*

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 and Health*

OSHA: *Occupational Safety & Health Administration*

TLV: *Threshold Limit Value*

PEL: *Permissible Exposure Limit*

REL: *Recommended Exposure Limit*

Acute Tox. 4: *Acute toxicity – Category 4*

Skin Corr. 1A: *Skin corrosion/irritation – Category 1A*

Eye Dam. 1: *Serious eye damage/eye irritation – Category 1*

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

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