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

- **1.1 Product identifier**
  - Trade name: Alfa Green 07/ Mud Cleaner

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - HOCNF registrated defatting liquid for shipping and offshore. Alkaline.

- **1.3 Details of the supplier of the safety data sheet**
  - **Supplier:**
    - Alfa Laval Tumba AB
    - Hans Stahles väg 7
    - S-147 80 Tumba
    - Sweden
    - +46 8 530 650 00
    - info.se@alfalaval.com

  - **Further information obtainable from:**
    - For further questions regarding the safety data sheet, please contact your local Alfa Laval Sales Company which you find at www.alfalaval.com or in section 16 "Other Information" in the end of the safety data sheet

- **1.4 Emergency telephone number:**
  - For immediate, life-threatening emergencies, call 999
  - For health advice and information (24h) dial 111 (NHS direct).
  - In Europe: Call 112 and ask for poison information.

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**
    - Skin Corr. 1A  H314  Causes severe skin burns and eye damage.
    - Eye Dam. 1  H318  Causes serious eye damage.

- **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**
    - The product is classified and labelled according to the CLP regulation.
  - **Hazard pictograms**
    - GHS05

- **Signal word** Danger

- **Hazard-determining components of labelling:**
  - disodium metasilicate
  - Hexyl D-glucoside
  - POLY(OXY-1,2-ETHANEDIYL), .ALPHA.-.(2-PROPYLHEPTYL)-.OMEGA.-.HYDROXY-
## Hazard statements

- H314 Causes severe skin burns and eye damage.

## Precautionary statements

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P262 Do not get in eyes, on skin, or on clothing.
- P303+P351+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P363 Wash contaminated clothing before reuse.
- P314 Get medical advice/attention if you feel unwell.
- P404 Store in a closed container.

## 2.3 Other hazards

- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>7758-29-4</td>
<td>231-838-7</td>
<td>pentasodium triphosphate</td>
<td>1-5%</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>water, distilled, conductivity or of similar purity</td>
<td>50-100%</td>
</tr>
</tbody>
</table>

#### Dangerous components:

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Substance</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>6834-92-0</td>
<td>229-912-9</td>
<td>disodium metasilicate</td>
<td>1-5%</td>
</tr>
<tr>
<td>54549-24-5</td>
<td>2119492545-29</td>
<td>Hexyl D-glucoside</td>
<td>1-5%</td>
</tr>
<tr>
<td>7601-54-9</td>
<td>231-509-8</td>
<td>trisodium orthophosphate</td>
<td>1-5%</td>
</tr>
<tr>
<td>160875-66-1</td>
<td></td>
<td>POLY(OXY-1,2-ETHANEDIYL), .ALPHA.- (2-PROPYLHEPTYL)- .OMEGA.-HYDROXY-</td>
<td>1-5%</td>
</tr>
<tr>
<td>112-34-5</td>
<td>203-961-6</td>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>0.1-1%</td>
</tr>
</tbody>
</table>

#### Additional information:

- For the wording of the listed risk phrases refer to section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- General information: Immediately remove any clothing soiled by the product.
· **After inhalation:**
  Supply fresh air.
  Seek medical treatment if symptoms persists.
· **After skin contact:**
  Immediately wash with water and soap and rinse thoroughly.
  If skin irritation continues, consult a doctor.
· **After eye contact:**
  IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  If symptoms persist consult doctor.
· **After swallowing:**
  Rinse out mouth and then drink plenty of water.
  If symptoms persist consult doctor.

· **4.2 Most important symptoms and effects, both acute and delayed**
  No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**
  No further relevant information available.

*SECTION 5: Firefighting measures*

· **5.1 Extinguishing media**
  Suitable extinguishing agents:
  CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  For safety reasons unsuitable extinguishing agents: Not applicable.
· **5.2 Special hazards arising from the substance or mixture**
  No further relevant information available.
· **5.3 Advice for firefighters**
  Protective equipment: No special measures required.

*SECTION 6: Accidental release measures*

· **6.1 Personal precautions, protective equipment and emergency procedures**
  See Section 8 for information on personal protection equipment.
  Wear protective equipment. Keep unprotected persons away.
  Do not get in eyes, on skin, or on clothing.
· **6.2 Environmental precautions:**
  Do not allow to enter sewers/ surface or ground water.
  Inform respective authorities in case of seepage into water course or sewage system.
  Dilute with plenty of water.
· **6.3 Methods and material for containment and cleaning up:**
  Small spillages (<20L) can be washed out with water into drain. (10:1)
  Larger spills (>20L):
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Water
  Dispose contaminated material as waste according to item 13.
· **6.4 Reference to other sections**
  See Section 8 for information on personal protection equipment.
41.1.10 See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling
  Prevent formation of aerosols.
  When using do not eat, drink or smoke.
  Avoid contact with skin and eyes.
  Ensure that washing facilities are available at the work place.
  Information about fire - and explosion protection: No special measures required.

· 7.2 Conditions for safe storage, including any incompatibilities

  · Storage:
    · Requirements to be met by storerooms and receptacles:
      Protect from sunlight.
      Protect from frost.
    · Information about storage in one common storage facility: Not required.
    · Further information about storage conditions: Keep container tightly sealed.

· 7.3 Specific end use(s) Professional use only.

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· 8.1 Control parameters

  · Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
<th>WEL</th>
<th>Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>112-34-5</td>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>Short-term value: 101.2 mg/m³, 15 ppm</td>
<td>Long-term value: 67.5 mg/m³, 10 ppm</td>
</tr>
</tbody>
</table>

  · Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

  · Personal protective equipment:
    · General protective and hygienic measures:
      Immediately remove all soiled and contaminated clothing
      Wash hands before breaks and at the end of work.
      Avoid contact with the eyes and skin.
    · Respiratory protection: Not necessary if room is well-ventilated.
    · Protection of hands:

      Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
Nitrile rubber, NBR
Chloroprene rubber, CR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:
Tightly sealed goggles

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:
Form: Liquid
Colour: Yellow-brown
Odour: Characteristic
Odour threshold: Not determined.

pH-value at 20 °C: ~12.5

Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 100 °C

Flash point: Not applicable.

Flammability (solid, gaseous): Not applicable.

Ignition temperature:
Decomposition temperature: Not determined.
Self-igniting: Product is not selfigniting.

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

Explosion limits:
Lower: Not determined.
Upper: Not determined.

Vapour pressure at 20 °C: ~23 hPa
Safety data sheet  
according to 1907/2006/EC, Article 31

Printing date 29.10.2015  
Revision: 29.10.2015

Trade name: Alfa Green 07/ Mud Cleaner

- Density at 20 °C: ~1.083 g/cm³
- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.
- Solubility in / Miscibility with water: Fully miscible.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:  
  Dynamic: Not determined.
  Kinematic: Not determined.
- 9.2 Other information: No further relevant information available.

---

SECTION 10: Stability and reactivity

- 10.1 Reactivity: No further relevant information available.
- 10.2 Chemical stability: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions: No dangerous reactions known.
- 10.4 Conditions to avoid: No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

---

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects:

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6834-92-0 disodium metasilicate</td>
<td></td>
</tr>
<tr>
<td>Oral LD50</td>
<td>1280 mg/kg (rat)</td>
</tr>
<tr>
<td>7601-54-9 trisodium orthophosphate</td>
<td></td>
</tr>
<tr>
<td>Oral LD50</td>
<td>&gt;2000 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>300 mg/kg (rabbit)</td>
</tr>
<tr>
<td>112-34-5 2-(2-butoxyethoxy)ethanol</td>
<td></td>
</tr>
<tr>
<td>Oral LD50</td>
<td>5660 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>4000 mg/kg (rabbit)</td>
</tr>
</tbody>
</table>

  - Primary irritant effect:  
    - Skin corrosion/irritation  
      Causes severe skin burns and eye damage.
    - Serious eye damage/irritation  
      Causes serious eye damage.
  - Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
**SECTION 12: Ecological information**

**12.1 Toxicity**

- **Aquatic toxicity:**

<table>
<thead>
<tr>
<th>Chemical</th>
<th>EC50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>54549-24-5 Hexyl D-glucoside</td>
<td>&gt;100 mg/L (Algae)</td>
<td>&gt;100 mg/L (Fish)</td>
</tr>
<tr>
<td></td>
<td>Duration: 72 h</td>
<td>Duration: 96h</td>
</tr>
<tr>
<td></td>
<td>&gt;100 mg/L (daphnia)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Duration: 48 h</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical</th>
<th>EC50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>7601-54-9 trisodium orthophosphate</td>
<td>&gt;100 mg/L (Algae)</td>
<td>&gt;100 mg/L (Fish)</td>
</tr>
<tr>
<td></td>
<td>Duration: 72 h</td>
<td>Duration: 96h</td>
</tr>
<tr>
<td></td>
<td>&gt;100 mg/L (daphnia)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Duration: 48 h</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical</th>
<th>EC50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>160875-66-1 POLY(OXY-1,2-ETHANEDIYL), .ALPHA.-{2-PROPYLHEPTYL}.-OMEGA.-HYDROXY-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;100 mg/L (Algae)</td>
<td>&gt;100 mg/L (Fish)</td>
</tr>
<tr>
<td></td>
<td>Duration: 74 h</td>
<td>Duration: 96h</td>
</tr>
<tr>
<td></td>
<td>10-100 mg/L (daphnia)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Duration: 48 h</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical</th>
<th>IC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>112-34-5 2-(2-butoxyethoxy)ethanol</td>
<td>1000 mg/L (Algae)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical</th>
<th>IC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>112-34-5 2-(2-butoxyethoxy)ethanol</td>
<td></td>
</tr>
<tr>
<td></td>
<td>72h</td>
</tr>
</tbody>
</table>

**12.2 Persistence and degradability** Easily biodegradable

**12.3 Bioaccumulative potential** Does not accumulate in organisms

**12.4 Mobility in soil** Some mobility in soil can be expected

**Additional ecological information:**

**General notes:**

- Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- Must not reach sewage water or drainage ditch undiluted or unneutralised.
- 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.
· 12.5 Results of PBT and vPvB assessment
  · PBT: Not applicable.
  · vPvB: Not applicable.
· 12.6 Other adverse effects No further relevant information available.

**SECTION 13: Disposal considerations**

· 13.1 Waste treatment methods
  · Recommendation
    Must not be disposed together with household garbage. Do not allow product to reach sewage system.
  · European waste catalogue
    The European Waste Catalogue (EWC) waste codes do not refer to product but to origin. The manufacturer is therefore unable to quote a waste code for products which are used in various industries. Any codes shown should be regarded as a recommendation to the user.
    EWC waste code: 0706
    Dangerous Waste

· Uncleaned packaging:
  · Recommendation: Disposal must be made according to official regulations.
  · Recommended cleansing agents: Water, if necessary together with cleansing agents.

**SECTION 14: Transport information**

· 14.1 UN-Number
  · ADR, IMDG, IATA
    UN1719
· 14.2 UN proper shipping name
  · ADR, IMDG, IATA
    1719 CAUSTIC ALKALI LIQUID, N.O.S.
    CAUSTIC ALKALI LIQUID, N.O.S.
· 14.3 Transport hazard class(es)
  · ADR, IMDG, IATA
    · Class
      8 Corrosive substances.
· 14.4 Packing group
  · ADR, IMDG, IATA
    · III
· 14.5 Environmental hazards:
  · Marine pollutant:
    No
· 14.6 Special precautions for user
  · Danger code (Kemler): 80
  · EMS Number: F-A,S-B
  · Segregation groups
    Alkalis
· 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
EU regulation (EC) no 1272/2008 (CLP)
EU Regulation (EC) no.1907/2006 (REACH)

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

 SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

LIMITATION OF LIABILITY
This document is only intended to be used as guidance as regards the risks of which we are aware that are associated with the product. Every individual who works with the product or in close proximity of it must receive suitable training. Individuals who come into contact with the product must be capable of using their own judgement as regards conditions or methods for handling, storing and using the product. Alfa Laval is not liable for demands, losses or damage of any kind that arise from flaws or deficiencies in this document or from using, handling, storing or disposing of the product unless it can be proven that Alfa Laval has acted in a grossly negligent manner. Beyond what has been agreed upon and specified in writing with Alfa Laval in the individual case, Alfa Laval makes no promises or assumes any liability, including but not limited to implicit guarantees regarding marketability or appropriateness in terms of both the information provided in this document and the product to which the information refers.

Please contact your local Alfa Laval Sales Company for further questions:
www.alfalaval.com

Relevant phrases:
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Department issuing MSDS: Alfa Laval Materials and Chemistry Centre (MACC)

Contact:
Please contact your local Alfa Laval Sales Company for further questions:
Argentina: alfa.consulta@alfalaval.com
Australia: australia.info@alfalaval.com
Austria: info.mideurope@alfalaval.com
Trade name: Alfa Green 07/ Mud Cleaner

Belgium: benelux.info@alfalaval.com
Bolivia: alfa.consulta@alfalaval.com
Brazil: alfalaval.br@alfalaval.com
Bulgaria: bulgaria.info@alfalaval.com
Canada: alfacan.info@alfalaval.com
Chile: chile.informacion@alfalaval.com
China: china.info@alfalaval.com
Colombia: info.colombia@alfalaval.com
Croatia: hrvatska.info@alfalaval.com
Czech Republic: czechrepublic.info@alfalaval.com
Denmark: info.nordic.dk@alfalaval.com
Egypt: alme.marketing@alfalaval.com
Estonia: estonia.info@alfalaval.com
Finland: info.fi@alfalaval.com
France: environnement@alfalaval.com
Germany: info.mideurope@alfalaval.com
Greece: greece.info@alfalaval.com
Hungary: info.hu@alfalaval.com
India: india.info@alfalaval.com
Indonesia: alfalindo@alfalaval.com
Israel: israel.info@alfalaval.com
Italy: alfalaval.it@alfalaval.com
Latvia: latvia.info@alfalaval.com
Lithuania: lithuania.info@alfalaval.com
Malaysia: malaysia.info@alfalaval.com
Mexico: mexico.info@alfalaval.com
The Netherlands: benelux.info@alfalaval.com
New Zealand: newzealand.info@alfalaval.com
Norway: info.no@alfalaval.com
Peru: ventas.peru@alfalaval.com
Philippines: philippines.info@alfalaval.com
Poland: poland.info@alfalaval.com
Portugal: portugal.info@alfalaval.com
Qatar: alme.marketing@alfalaval.com
Romania: romania.info@alfalaval.com
Russia: moscow.response@alfalaval.com
Singapore: al.singapore@alfalaval.com
Slovak Republic: slovakia.info@alfalaval.com
Slovenia: slovenija.info@alfalaval.com
South Africa: info.sa@alfalaval.com
Spain: info.spain@alfalaval.com
Sweden: info.se@alfalaval.com
Switzerland: info.mideurope@alfalaval.com
Taiwan: taiwan.info@alfalaval.com
Thailand: thailand.info@alfalaval.com
Turkey: turkey@alfalaval.com
Ukraine: ukraine.info@alfalaval.com
United Arab Emirates: alme.marketing@alfalaval.com
United Kingdom: general.uk@alfalaval.com
United States: customerservice.usa@alfalaval.com

(Contd. of page 11)
**Safety data sheet**  
**according to 1907/2006/EC, Article 31**

**Trade name:** Alfa Green 07/ Mud Cleaner

<table>
<thead>
<tr>
<th>Abbreviations and acronyms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>IMDG: International Maritime Code for Dangerous Goods</td>
</tr>
<tr>
<td>IATA: International Air Transport Association</td>
</tr>
<tr>
<td>GHS: Globally Harmonised System of Classification and Labelling of Chemicals</td>
</tr>
<tr>
<td>EINECS: European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS: European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>CAS: Chemical Abstracts Service (division of the American Chemical Society)</td>
</tr>
<tr>
<td>VOC: Volatile Organic Compounds (USA, EU)</td>
</tr>
<tr>
<td>PBT: Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>vPvB: very Persistent and very Bioaccumulative</td>
</tr>
<tr>
<td>Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A</td>
</tr>
<tr>
<td>Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B</td>
</tr>
<tr>
<td>Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2</td>
</tr>
<tr>
<td>Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2</td>
</tr>
<tr>
<td>STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3</td>
</tr>
</tbody>
</table>

* * Data compared to the previous version altered. *