

Safety data sheet
According to 1907/2006/EC, Article 31 REACH

Printing date 05.05.2016

Version: 7

Revision: 05.05.2016

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

1.1 Product identifier

· **Trade name:** FS FORMULA 10184 (Listed NSF A8: n°152424)

· **Article number:** 94790001

1.2 Relevant identified uses of the substance or mixture and uses advised against

· **Sector of Use**

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· **Product category PC35** Washing and cleaning products (including solvent based products)

1.3 Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**

ZEP UK Ltd

PO Box 12 Tanhouse Lane

Widnes Cheshire, WA8 0RR

United Kingdom

Phone: +44 (0)151 422 1000

FAX: +44 (0)151 422 1011

@: info@zep.co.uk

web: www.zep.co.uk

ZEP Industries BV

Vierlinghweg 30

4612 PN Bergen op Zoom

The Netherlands

Tel: (NL) + 31 164 250 100 (B) + 32 2 347 0117

Fax:(NL) + 31 164 266 710 (B) + 32 2 347 1395

@: sales@zepbenelux.com

ZEP ITALIA SRL

Via Netunese Km. 25.000

04011 Aprilia (LT) - Italy

Tel: +39.06.926691

Fax: +39.06.92747061

@: tecnico@zepeurope.com

Sito: www.zep.it

· **Further information obtainable from:**

Customer Service

NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710

B: Tel: +32 2 347 0117 Fax: +32 2 347 1395

IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61

UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

· **1.4 Emergency telephone number:**

Customer Service

NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710

B: Tel: +32 2 347 0117 Fax: +32 2 347 1395

IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61

UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

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 substance is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS05

(Contd. on page 2)

GB

Safety data sheet

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Trade name: FS FORMULA 10184 (Listed NSF A8: n°152424)

(Contd. of page 1)

- **Signal word** *Danger*
- **Hazard-determining components of labelling:**
sodium hydroxide
Potassium hydroxide
- **Hazard statements**
H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
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.
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.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:

| | | |
|---|--|--------|
| CAS: 1310-73-2 EINECS: 215-185-5 Reg.nr.: 01-2119457892-27-xxxx | sodium hydroxide Met. Corr.1, H290; Skin Corr. 1A, H314 | 10-25% |
| CAS: 1310-58-3 EINECS: 215-181-3 Reg.nr.: 01-2119487136-33 | Potassium hydroxide Skin Corr. 1A, H314 Acute Tox. 4, H302 | 2.5-5% |
| CAS: 68515-73-1 NLP: 500-220-1 Reg.nr.: 01-2119488530-36 | alkyl C8-C10 polyglucocide Eye Dam. 1, H318 | 2.5-5% |

- **Ingredients according to Detergents Regulation 648/2004/EC**
For the wording of the listed hazard phrases refer to section 16.

| | |
|----------------------|------|
| Nonionic surfactants | < 5% |
|----------------------|------|

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **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.
- **5.2 Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.

(Contd. on page 3)

Safety data sheet

According to 1907/2006/EC, Article 31 REACH

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Revision: 05.05.2016

Trade name: FS FORMULA 10184 (Listed NSF A8: n°152424)

(Contd. of page 2)

- **5.3 Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, universal binders).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **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.
- **7.3 Specific end use(s)** No further relevant information available.

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:**

1310-73-2 sodium hydroxide (10-25%)

WEL (Great Britain) Short-term value: 2 mg/m³

1310-58-3 Potassium hydroxide (2.5-5%)

WEL (Great Britain) Short-term value: 2 mg/m³

- **DNELs**

1310-73-2 sodium hydroxide

| | | |
|------------|--|--|
| Inhalative | DNEL Long term local mg/m ³ | 1 mg/m ³ (consumer) 1 mg/m ³ (worker) |
|------------|--|--|

1310-58-3 Potassium hydroxide

| | | |
|------------|--|------------------------------|
| Inhalative | DNEL Long term local mg/m ³ | 1 mg/m ³ (worker) |
|------------|--|------------------------------|

68515-73-1 alkyl C8-C10 polyglucoside

| | | |
|------------|---|--|
| Oral | DNEL Long term-systemic | 35.7 mg/kg human/day (consumer) |
| Dermal | DNEL Long term-systemic | 357000 mg/kg human/day (consumer) 595000 mg/kg human/day (worker) |
| Inhalative | DNEL Long term-systemic mg/m ³ | 124 mg/m ³ (consumer) 420 mg/m ³ (worker) |

- **PNECs**

68515-73-1 alkyl C8-C10 polyglucoside

| | |
|----------------------|-----------------|
| PNEC Freshwater mg/L | 0.1000 mg/L (-) |
|----------------------|-----------------|

(Contd. on page 4)

Safety data sheet

According to 1907/2006/EC, Article 31 REACH

Printing date 05.05.2016

Version: 7

Revision: 05.05.2016

Trade name: FS FORMULA 10184 (Listed NSF A8: n°152424)

(Contd. of page 3)

| | |
|----------------------------------|------------------|
| PNEC Marinewater mg/L | 0.01000 mg/L (-) |
| PNEC Freshwater sediment | 0.487 mg/Kg (-) |
| PNEC Marine water sediment | 0.048 mg/Kg (-) |
| PNEC Intermittent release | 0.270 (-) (mg/L) |
| PNEC Soil | 0.654 mg/Kg (-) |
| PNEC Sewage treatment Plant mg/L | 560 mg/L (-) |

· **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

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Protection of hands:**



Protective gloves

· **Material of gloves**

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.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

· **Not suitable are gloves made of the following materials:** Strong material gloves

· **Eye protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Fluid

Colour: Brown

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **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.

(Contd. on page 5)

Safety data sheet

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Trade name: FS FORMULA 10184 (Listed NSF A8: n°152424)

(Contd. of page 4)

| | |
|--|--|
| · Vapour pressure at 20 °C: | 23 hPa |
| · Density at 20 °C: | 1.24 g/cm ³ |
| · 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. |
| · Solvent content: | |
| Organic solvents: | 0.0 % |
| Solids content: | 26.2 % |
| · 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
- Thermal decomposition / conditions to be avoided: 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
- Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

1310-73-2 sodium hydroxide

| | | |
|--------|-------------|-------------------------------|
| Oral | LD50 | 2000 mg/kg (Rat) |
| Dermal | LD50 | 1350 mg/kg (Rabbit) |
| | LC50 / 96 h | 125 mg/ltr (Gambusia affinis) |

1310-58-3 Potassium hydroxide

| | | |
|------|------------|------------------|
| Oral | LD50 | 333 mg/kg (Rat) |
| | LC50/ 24 h | 80 mg/ltr (fish) |

68515-73-1 alkyl C8-C10 polyglucoside

| | | |
|--------|------|--------------------|
| Dermal | LD50 | > 2000 mg/kg (Rat) |
|--------|------|--------------------|

- 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.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

GB

(Contd. on page 6)

Safety data sheet
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Trade name: FS FORMULA 10184 (Listed NSF A8: n°152424)

(Contd. of page 5)



SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 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, even in small quantities.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even extremely small quantities leak into the ground.
- **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** Disposal must be made according to official regulations
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN3266
- **14.2 UN proper shipping name**
- **ADR** 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE)
- **IMDG** CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE)
- **IATA** Corrosive liquid, basic, inorganic, n.o.s. (Sodium hydroxide, Potassium hydroxide)
- **14.3 Transport hazard class(es)**
- **ADR**
- 
- **Class** 8 (C5) Corrosive substances.
- **Label** 8
- **IMDG, IATA**
- 
- **Class** 8 Corrosive substances.
- **Label** 8
- **14.4 Packing group**
- **ADR, IMDG, IATA** II
- **14.5 Environmental hazards:** Not applicable.
- **14.6 Special precautions for user** Warning: Corrosive substances.
- **Danger code (Kemler):** 88
- **EMS Number:** F-A,S-B
- **Segregation groups** Alkalis

(Contd. on page 7)

GB

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Trade name: FS FORMULA 10184 (Listed NSF A8: n°152424)

(Contd. of page 6)

| | |
|--|---|
| · Stowage Category | B |
| · Stowage Code | SW2 Clear of living quarters. |
| · Segregation Code | SG35 Stow "separated from" acids. |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| · ADR | |
| · Limited quantities (LQ) | 1L |
| · Excepted quantities (EQ) | Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml |
| · Transport category | 2 |
| · Tunnel restriction code | E |
| · IMDG | |
| · Limited quantities (LQ) | 0 |
| · Excepted quantities (EQ) | Code: E0 Not permitted as Excepted Quantity |
| · UN "Model Regulation": | UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., 8, II |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
Reg. (EC) n. 1272/2008 - CLP;
Reg. (EC) n. 1907/2006 – Reach;
Reg. (EC) n. 2015/830 annex II of REACH;
Reg. (EC) n. 648/04 (Detergents);
Reg. (EC) n. 528/12 (Biocides BPR);
Reg. (EC) n. 1223/2009 (Cosmetics);
Dir. 06/08 ADR – RID - IMDG - IATA;
Dir. 47/08 (Aerosols); Dir. 12/18 (Seveso III);
Dir. 2008/98/CE and Reg. (EC) n.1357/2014 (Waste management)
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Waterhazard class:** Water danger class 3 (Self-assessment): extremely hazardous for water.
- **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.

- **Relevant phrases**
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
- **Department issuing SDS:**
Customer Service
NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710
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(Contd. on page 8)

Safety data sheet
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(Contd. of page 7)

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosive to metals, Hazard Category 1

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

· * Data compared to the previous version altered.

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