

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 17.03.2016

Version: 7

Revision: 17.03.2016

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

1.1 Product identifier

· **Trade name:** FS FOAM CHLOR

· **Article number:** 24440002

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)

· **Process category**

PROC19 Hand-mixing with intimate contact and only PPE available

PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

· **Environmental release category**

ERC8a Wide dispersive indoor use of processing aids in open systems

ERC8d Wide dispersive outdoor use of processing aids in open systems

· **Application of the substance / the mixture** Alkaline cleaner/ detergent

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

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@: info@zep.co.uk

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04011 Aprilia (LT) - Italy

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· **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

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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.

Aquatic Acute 1 H400 Very toxic to aquatic life.

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- **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 GHS09

- **Signal word** Danger
- **Hazard-determining components of labelling:**
sodium hypochlorite, solution
sodium hydroxide
- **Hazard statements**
H314 Causes severe skin burns and eye damage.
H400 Very toxic to aquatic life.
- **Precautionary statements**
P260 Do not breathe vapours.
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** The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds.
- **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: 7681-52-9 EINECS: 231-668-3 Reg.nr.: 01-2119488154-34-XXXX	sodium hypochlorite, solution Met. Corr.1, H290; Skin Corr. 1B, H314 Aquatic Acute 1, H400	2.5-5%
CAS: 85711-69-9 EINECS: 288-330-3	Sulfonic acids, C13-17-sec-alkanesulfonic, sodium salts Eye Dam. 1, H318 Acute Tox. 4, H302; Skin Irrit. 2, H315	2.5-5%
CAS: 1300-72-7 EINECS: 215-090-9 Reg.nr.: 01-2119513350-56	sodium xylene sulphonate Eye Irrit. 2, H319	2.5-5%
CAS: 1310-73-2 EINECS: 215-185-5 Reg.nr.: 01-2119457892-27-xxxx	sodium hydroxide Met. Corr.1, H290; Skin Corr. 1A, H314	1-2.5%
CAS: 68955-55-5 931-341-1 Reg.nr.: 01-2119489396-21-xxxx	Amines, C12-18 alkyldimethyl, N-oxides Eye Dam. 1, H318 Aquatic Acute 1, H400 Skin Irrit. 2, H315	1-2.5%
CAS: 1310-58-3 EINECS: 215-181-3 Reg.nr.: 01-2119487136-33	Potassium hydroxide Skin Corr. 1A, H314 Acute Tox. 4, H302	1-2.5%

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

Anionic surfactants	5 - 15%
Chlorine based bleaching agents, Cationic surfactants, Polycarboxylates	< 5%

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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:**
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
Seek medical treatment.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Do not induce vomiting; call for medical help immediately.
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.
- **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:** Do not allow to enter sewers/ surface or ground water.
- **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**
Store in cool, dry place in tightly closed receptacles.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Use only in well ventilated areas.
- **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:** Do not store together with acids.
- **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.

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· 8.1 Control parameters

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

1310-73-2 sodium hydroxide (1-2.5%)

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

1310-58-3 Potassium hydroxide (1-2.5%)

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

· DNELs

7681-52-9 sodium hypochlorite, solution

Oral DNEL Long term-systemic 0.26 mg/kg human/day (consumer)

Inhalative DNEL Long term-systemic mg/m³ 1.55 mg/m³ (consumer)1.55 mg/m³ (worker)DNEL Long term local mg/m³ 1.55 mg/m³ (consumer)1.55 mg/m³ (worker)DNEL Acute-systemic mg/m³ 3.1 mg/m³ (worker)DNEL Acute-local mg/m³ 3.1 mg/m³ (worker)

1310-73-2 sodium hydroxide

Inhalative DNEL Long term local mg/m³ 1 mg/m³ (consumer)1 mg/m³ (worker)

1310-58-3 Potassium hydroxide

Inhalative DNEL Long term local mg/m³ 1 mg/m³ (worker)

· PNECs

7681-52-9 sodium hypochlorite, solution

PNEC Freshwater mg/L 0.21 mg/L (-)

PNEC Marinewater mg/L 0.042 mg/L (-)

PNEC Sewage treatment Plant mg/L 0.03 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:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Protection of hands:**



Protective gloves

Rubber gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· 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.

Rubber gloves

· 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

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· Eye protection:



Tightly sealed goggles

· Body protection: Alkaline resistant protective clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Colour:	Light yellow
Odour:	Chlorine-like
Odour threshold:	Not determined.

· pH-value at 20 °C: 13.7

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	106 °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

· Density at 20 °C: 1.13 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 at 20 °C:	15 s (DIN 53211/4)

· Solvent content:

Organic solvents: 0.0 %

Solids content: 4.5 %

· 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: Strong exothermic reaction with acids.

· 10.4 Conditions to avoid: No further relevant information available.

· 10.5 Incompatible materials: No further relevant information available.

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· 10.6 Hazardous decomposition products: Chlorine

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:

7681-52-9 sodium hypochlorite, solution

Oral	LD50	>2000 mg/kg (Rat)
Dermal	LD50	>2000 mg/kg (Rabbit)
	LC50 / 96 h	0.22-0.62 mg/ltr (Pimephales promelas)
	EC 50 / 48 h	0.141 mg/ltr (Daphnia magna (water flea))

85711-69-9 Sulfonic acids, C13-17-sec-alkanesulfonic, sodium salts

Oral	LD50	± 1900 mg/kg (Mouse) ± 5000 mg/kg (Rat)
	LC50 / 48 h	2.8 mg/ltr (Oncorhynchus mykiss (Rainbow trout))
	EC50	12.5 mg/ltr (Daphnia magna (water flea)) 24 hours OECD 202

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)

68955-55-5 Amines, C12-18 alkyl dimethyl, N-oxides

Oral	LD50	>2820 mg/kg (Rat)
Dermal	LD50	>2000 mg/kg (Rat)
	LC50 / 96 h	1.26 mg/ltr (fish)
	EC 50 / 48 h	2.4 mg/ltr (Daphnia magna (water flea))

1310-58-3 Potassium hydroxide

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

· 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.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

85711-69-9 Sulfonic acids, C13-17-sec-alkanesulfonic, sodium salts

OECD test 301 E ± 99 (biodegradation in % after 10 days)

· 12.2 Persistence and degradability No further relevant information available.

· Other information: The product is biodegradable.

· 12.3 Bioaccumulative potential No further relevant information available.

· 12.4 Mobility in soil No further relevant information available.

· Ecotoxicological effects:

· Remark: Very toxic for fish

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· 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.

In accordance with the requirements of the RVO in the Act on Detergents and Cleansing Agents, tensides are biodegradable up to at least 90 %.

Very toxic for aquatic organisms

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.

Disposal must be made according to official regulations

· European waste catalogue

12 00 00	WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS
12 01 00	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 05	plastics shavings and turnings
20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	separately collected fractions (except 15 01)
20 01 15*	Alkalines

· Uncleaned packaging:

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number

· **ADR, IMDG, IATA**

UN1719

· 14.2 UN proper shipping name

· **ADR**

1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE), ENVIRONMENTALLY HAZARDOUS

· **IMDG**

CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE), MARINE POLLUTANT

· **IATA**

Caustic alkali liquids, n.o.s. (Sodium hydroxide, Potassium hydroxide)

· 14.3 Transport hazard class(es)

· **ADR**



· **Class**

8 (C5) Corrosive substances.

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· **Label** 8· **IMDG**· **Class** 8 Corrosive substances.· **Label** 8· **IATA**· **Class** 8 Corrosive substances.· **Label** 8· **14.4 Packing group**· **ADR, IMDG, IATA** III· **14.5 Environmental hazards:** Product contains environmentally hazardous substances: sodium hypochlorite, solution· **Marine pollutant:** Yes· **Special marking (ADR):** Symbol (fish and tree)

Symbol (fish and tree)

· **14.6 Special precautions for user** Warning: Corrosive substances.· **Danger code (Kemler):** 80· **EMS Number:** F-A,S-B· **Segregation groups** Alkalis· **Stowage Category** A· **Segregation Code** SG22 Stow "away from" ammonium salts

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)** 5L· **Excepted quantities (EQ)** Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **Transport category** 3· **Tunnel restriction code** E· **IMDG**· **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

· **UN "Model Regulation":** UN 1719 CAUSTIC ALKALI LIQUID, N.O.S., 8, III, ENVIRONMENTALLY HAZARDOUS

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);

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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.
- **Seveso category E1** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **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.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H400 Very toxic to aquatic life.

- **Department issuing SDS:**

Customer Service
 NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710
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- **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
 Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
 Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

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