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Product Information Sheet

EASYFOAM VF32

Liquid chlorinated foaming detergent

Description

Easyfoam is a high foaming, chlorinated liquid detergent designed for general purpose cleaning in the food, beverage and dairy industries.

Key properties

Easyfoam contains a blend of caustic alkali, hypochlorite and a high foaming wetting agent/emulsifier. It is effective for the removal of most food soils including animal and vegetable fats, blood and proteins. In addition, the presence of hypochlorite assists removal of organic and vegetable-based stains and helps to prevent build-up of .protein film. deposits.
Easyfoam is recommended for daily cleaning in vegetable processing, canning, wine and soft drink production. It is also suitable for use in abattoirs, poultry processors and the fish industry. It can be used for cleaning floors, walls, cutting tables, packing conveyors and other processing equipment.
Easyfoam is suitable for use with a wide range of foam application equipment.

Benefits

- Cost-effective cleaner
- Effective on most types of food soiling
- Assists stain removal
- Free rinsing

Use instructions

Use **Easyfoam** at concentrations between 2-10% v/v depending on the type and degree of soiling. For specific details please refer to individual method cards.

Technical data

Appearance:	Clear, pale yellow liquid
Relative Density at 20ºC:	1.15
pH (1% solution at 20ºC):	13.4
Chemical Oxygen Demand (COD):	49 gO2/kg
Nitrogen Content (N):	0.4 g/kg
Phosphorous Content (P):	none

The above data is typical of normal production and should not be taken as a specification.

Safe handling and storage information

Store in original closed containers, away from sunlight and extremes of temperatures. Full guidance on the handling and disposal of this product is provided in a separate Material Safety Data Sheet.

Product compatibility

Easyfoam when applied at the recommended concentration and temperature is suitable for use on the grades of stainless steel commonly found in the processed food industry. It is unsuitable for use on soft metals such as aluminium and galvanised materials. Always rinse surfaces thoroughly after use (within 1 hour). In the event of uncertainty it is advisable to evaluate individual materials before any prolonged use.

Test method

Reagents:	0.1N Hydrochloric or sulphuric acid 0.1N Sodium Thiosulphate Phenolphthalein indicator
Procedure:	Add 10ml of 0.1N sodium Thiosulphate to 10ml of the test solution, mix well and allow to stand for about 30 seconds, add 2-3 drops of the indicator solution and titrate with the acid to a colourless end point.
Calculation:	% v/v **Easyfoam** = titre (ml) x 0.40 % w/v **Easyfoam** = titre (ml) x 0.45 % w/w **Easyfoam** = titre (ml) x 0.45

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SAFETY DATA SHEET

According to Regulation [EC] No. 1907/2006

EASYFOAM VF32

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product Name: Easyfoam VF32
Product Code: MSDS1774
Supplier: Hugh Crane (Cleaning Equipment) Ltd.
South Walsham Road, Acle,
Norwich, NR13 3ES
Telephone: (01493) 750072 Fax (01493) 751854
Emergency Telephone: For medical or environmental emergency only: call 0800 052 0185

Relevant Identified Uses Of The Substance Or Mixture And Uses Advised Against

Identified Uses: For professional and industrial use only.
AISE-P806 – Foam cleaner – semi automatic with venting process.
AISE-P807 – Foam cleaner – semi automatic without venting process.
Soaking bath. Manual process. (AISE_CS_I01 & AISE_CS_I10)
General purpose cleaner for industrial facilities. Manual process.
General purpose cleaner for industrial facilities. Spray and wipe manual process.
Uses advised against: Uses other than those identified are not recommended

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

The product has been classified and labelled in accordance with Regulation (EC) No 1272/2008.
EUH031
Skin Corr. 1A (H314)
Aquatic Acute 1 (H400)
Aquatic Chronic 2 (H411)
Met. Corr. 1 (H290)

Classification in accordance with Directive 1999/45/EC and corresponding national legislation

Indication of danger: C - Corrosive
N - Dangerous for the environment
Risk phrases: R31 - Contact with acids liberates toxic gas.
R35 - Causes severe burns.
R50 - Very toxic to aquatic organisms.

Label Elements

Signal word: Danger
Contains sodium hydroxide (Sodium Hydroxide).
Hazard statements: EUH031 Contact with acids liberates toxic gas.
H314 Causes severe skin burns and eye damage.
H410 Very toxic to aquatic life with long lasting effects.
H290 May be corrosive to metals.
Precautionary statements: P260 Do not breathe vapours.
P280 Wear protective gloves, protective clothing and eye or face protection.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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 CENTRE, doctor or physician.
Other hazards: No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

Ingredient(s)	EC No,	CAS No.	REACH No.	Classification (1999/45/EC)	Classification EC 1272/2008	Weight %
Sodium Hydroxide	215-185-5	1310-73-2	01-2119457892-27	C R35	Skin Corr 1A (H314) Met Corr 1 (H290)	3-10
Sodium Hypochlorite	231-668-3	7681-52-9	01-2119488154-34	R 31 C R34 Xi R37 N R50	EUH031 Skin Corr 1B (H314) STOT SE 3 (H335)) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	1-3
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	931-292-6	-	01-21119490061-47	Xn R22 Xi R38-41 N R50	Acute Tox 4 (H302) Skin Irrit 2 (H315) Eye Dam 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)	0.1 - 1

* Polymer. For the full text of the R, H and EUH phrases mentioned in this Section, see Section 16.
Workplace exposure limit(s), if available, are listed in subsection 8.1.
[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.
[2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.
[3] Exempted: Annex V of Regulation (EC) No 1907/2006.
[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

4. FIRST AID MEASURES

Description of First Aid Measures

Inhalation: Get medical attention or advice if you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Take off immediately all contaminated clothing and wash it before re-use. Immediately call a POISON CENTRE, doctor or physician.

Eye contact: Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or physician.

Self-protection of first aider: Consider personal protective equipment as indicated in subsection 8.2.

Most important symptoms and effects, both acute and delayed

Inhalation: May cause bronchospasm in chlorine sensitive individuals.

Skin contact: Causes severe burns.

Eye contact: Causes severe or permanent damage.

Ingestion: Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

Special hazards arising from the substance or mixture: No special hazards known.

Advice for Firefighters: As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective Eqpt & emergency procedures: Ensure adequate ventilation. Do not breathe dust or vapour. In case of an incident in a confined area, wear suitable respiratory protection. Wear suitable protective clothing, gloves and eye/face protection.

Environmental precautions: Do not allow to enter drainage system, surface or ground water. Do not allow to enter ground/soil. Dilute with plenty of water. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

Methods and material for containment and cleaning up: Use neutralising agent. Absorb onto dry sand or similar inert material. Ensure adequate ventilation.

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Reference to other sections: For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

7. HANDLING & STORAGE

Precautions for safe handling

Measures to Prevent Fire & Explosion: No special precautions required.

Measures Required To Protect The Environment: No special precautions required.

Advice on General Occupational Hygiene: Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Sealed Air. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Do not breathe vapours. Use only with adequate ventilation.

Conditions For Safe Storage, Including Any Incompatibilities: Store in accordance with local and national regulations. Keep only in original container. Store in a closed container. For conditions to avoid and incompatible materials see Section 10.

Specific end use(s): No specific advice for end use available.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Control parameters

Workplace exposure limits

Air limit values, if available:

Ingredient(s)	UK Long Term Values	UK Short Term Values
Sodium Hydroxide		2 mg/m^3

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values

Human exposure

DNEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term – Local effects	Short term – Systemic effects	Long term – Local effects	Long term – Systemic effects
Sodium Hydroxide	No data available	No data available	No data available	No data available
Sodium Hypochlorite	No data available	No data available	No data available	0.26
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	No data available	No data available	No data available	0.44

DNEL dermal exposure – Worker

Ingredient(s)	Short term – Local effects	Short term – Systemic effects (mg/kg bw)	Long term – Local effects	Long term – Systemic effects (mg/kg bw)
Sodium Hydroxide	2%	No data available	No data available	No data available
Sodium Hypochlorite	No data available	No data available	0.5%	No data available
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	No data available	No data available	0.27%	11

DNEL dermal exposure - Consumer

Ingredient(s)	Short term – Local effects	Short term – Systemic effects (mg/kg bw)	Long term – Local effects	Long term – Systemic effects (mg/kg bw)
Sodium Hydroxide	2%	No data available	No data available	No data available
Sodium Hypochlorite	No data available	No data available	0.5%	No data available
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	No data available	No data available	0.27%	5.5

DNEL inhalatory exposure - Worker (mg/m^3)

Ingredient(s)	Short term – Local effects	Short term – Systemic effects	Long term – Local effects	Long term – Systemic effects
Sodium Hydroxide	No data available	No data available	1	No data available
Sodium Hypochlorite	3.1	3.1	1.55	1.55
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	No data available	No data available	No data available	15.5

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DNEL inhalatory exposure - Consumer (mg/m^3)

Ingredient(s)	Short term – Local effects	Short term – Systemic effects	Long term – Local effects	Long term – Systemic effects
Sodium Hydroxide	No data available	No data available	1	No data available
Sodium Hypochlorite	3.1	3.1	1.55	1.55
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	No data available	No data available	No data available	3.825

Environmental exposure

Environmental exposure – PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
Sodium Hydroxide	No data available	No data available	No data available	No data available
Sodium Hypochlorite	0.00021	0.000042	0.00026	0.03
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	0.0335	0.00335	0.0335	24

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m^3)
Sodium Hydroxide	No data available	No data available	No data available	No data available
Sodium Hypochlorite	No data available	No data available	No data available	0.00026
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	5.24	0.524	1.02	No data available

Exposure Controls

The following information applies for the uses indicated in subsection 1.2.
If available, please refer to the product information sheet for application and handling instructions.
Normal use conditions are assumed for this section.
*Recommended safety measures for handling the **undiluted** product:*
Covering activities such as filling and transfer of product to application equipment, flasks or buckets.

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required. Where possible, use in automated/closed system and cover open containers. Transport over pipes. Filling with automatic systems. Use tools for manual handling of product.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal Protective Equipment

Eye / face protection: Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.

Hand protection: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature

Suggested gloves for prolonged contact:
Material: butyl rubber
Penetration time: >= 480 min
Material thickness: >= 0.7 mm

Suggested gloves for protection against splashes:
Material: nitrile rubber
Penetration time: >= 30 min
Material thickness: >= 0.4 mm

In consultation with the supplier of protective gloves a different type providing similar protection may be chosen

Body protection: Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur.

Respiratory protection: If exposure to liquid particles or splashes cannot be avoided use: Half mask (EN140) with particle filter P2 (EN143) or full-face mask (EN136) with particle filter P1 (EN143). Consider specific local use conditions. In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen. Specific application tools may be available to limit exposure. Please refer to the product information sheet for the possibilities.

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Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or undiluted.

*Recommended safety measures for handling the **diluted** product:*
Recommended maximum concentration (%): 10
Appropriate engineering controls: Use only in well ventilated areas. Ensure that foam equipment does not generate respirable particles.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal Protective Equipment
Eye / face protection: Safety glasses or goggles (EN176) are always recommended for foam applications.
Hand protection: Chemical-resistant protective gloves (EN 374) are always recommended for foam applications. Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.
Suggested gloves for prolonged contact: Material: butyl rubber
Penetration time: >= 480 min
Material thickness: >= 0.7 mm
In consultation with the supplier of protective gloves a different type providing similar protection may be chosen
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.
Environmental exposure controls: No special requirements under normal use conditions.

9. PHYSICAL & CHEMICAL PROPERTIES

Information on basic physical and chemical properties
Information in this section refers to the product, unless it is specifically stated that substance data is listed
Physical State: Liquid
Colour: Clear pale yellow
Odour: Chlorine
Odour Threshold: Not applicable.
Ph: >12 (neat)
Melting/freezing point (°C): Not determined
Initial Boiling point/range (°C): Not determined
Substance Data, Boiling Point

Ingredient(s)	Value (ºC)	Method	Atmospheric Pressure (hPa)
Sodium Hydroxide	>990	Method not given	1013
Sodium Hypochlorite	96 – 120	Method not given	1013
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	>100	Method not given	

Flash point (°C): Not applicable.
Sustained Combustion: Not applicable.
Evaporation Rate: Not determined.
Flammability (Solid/Gas): Not determined.
Upper/Lower Flammability Limit: Not determined.

Substance Data, Flammability or Explosive Limits, if Available:

Vapour Pressure: Not determined.
Substance Data, Vapour Pressure:

Ingredient(s)	Value (Pa)	Method	Temperature (ºC)
Sodium Hydroxide	>1330	Method not given	20
Sodium Hypochlorite	1700 – 2000	Method not given	20
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	<10	Method not given	25

Vapour Density: Not determined.
Relative Density: 1.14g/cm^3 (20ºC)
Solubility in / Miscibility with Water: Fully miscible
Substance Data, Solubility in Water:

Ingredient(s)	Value (g/l)	Method	Temperature (ºC)
Sodium Hydroxide	1000	Method not given	20
Sodium Hypochlorite	No data available		
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	409.5 Soluble	Method not given	20

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Substance Data, partition coefficient n-octanol/water (log Kow): See section 12.

Autoignition Temperature: Not determined.
Decomposition Temperature: Not determined.
Viscosity: Not determined.
Explosive Properties: Not explosive.
Oxidising properties: Not oxidising.
Other information
Surface Tension (N/m): Not determined.
Corrosion To Metals: Corrosive Weight of evidence
(according to IMDG/ADR Regulations)
Substance Data, dissociation content, if available:

Ingredient(s)	Value	Method	Temperature (°C)
Sodium Hypochlorite	7.53 (kPa)	Method not given	

10. STABILITY & REACTIVITY

Reactivity: No reactivity hazards known under normal storage and use conditions.
Chemical stability: Stable under normal storage and use conditions.
Possibility of hazardous reactions: No hazardous reactions known under normal storage and use conditions.
Conditions to avoid: None known under normal storage and use conditions.
Incompatible materials: Reacts with acids releasing toxic chlorine gas. Keep away from acids.
Hazardous decomposition products: Chlorine

11. TOXICOLOGICAL INFORMATION

Information On Toxicological Effects
No data is available on the mixture

Substance data, where relevant and available, are listed below.

Acute toxicity
Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure Time (h)
Sodium Hydroxide		No data available			
Sodium Hypochlorite	LD_{50}	>1100	Rat	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	LD_{50}	>300 – 2000	Rat	OECD 401 (EU B.1)	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure Time (h)
Sodium Hydroxide		No data available			
Sodium Hypochlorite	LD_{50}	>20000	Rabbit	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	LD_{50}	>5000	Rat	OECD 402 (EU B.3)	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure Time (h)
Sodium Hydroxide		No data available			
Sodium Hypochlorite	LC_0	>10.5 Vapour	Rat	OECD 403 (EU B.2	1
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides		No data available			

Irritation and corrosivity
Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure Time (h)
Sodium Hydroxide	Corrosive	Rabbit	Method not given	
Sodium Hypochlorite	Corrosive	Rabbit	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	Irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure Time (h)
Sodium Hydroxide	Corrosive	Rabbit	Method not given	
Sodium Hypochlorite	Severe damage	Rabbit	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	Severe damage	Rabbit	OECD 405 (EU B.5)	

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Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure Time (h)
Sodium Hydroxide	No data available			
Sodium Hypochlorite	Irritating to respiratory tract			
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure Time (h)
Sodium Hydroxide	Not sensitising		Human repeated patch test	
Sodium Hypochlorite	Not sensitising	Guinea Pig	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	Not sensitising	Guinea Pig	OECD 406 (EU B.6) Buehler Test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure Time (h)
Sodium Hydroxide	No data available			
Sodium Hypochlorite	No data available			
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
Sodium Hydroxide	No evidence for mutagenicity, negative test results	DNA repair test on rat Hepatocytes OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B12) OECD 475 (EU B11)
Sodium Hypochlorite	No evidence for mutagenicity.	OECD 471 (EU B.12/13)	No evidence for mutagenicity, negative test results	Method not given
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	

Carcinogenicity

Ingredient(s)	Effect
Sodium Hydroxide	No evidence for carcinogenicity, weight-of-evidence.
Sodium Hypochlorite	No evidence for carcinogenicity, negative test results
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	End point	Specific Effect	Value (mg/kg bw/d)	Species	Method	Exposure Time	Remarks & other effects reported
Sodium Hydroxide			No data available				No evidence for developmental or reproductive toxicity.
Sodium Hypochlorite	NOAEL	Developmental toxicity	5 (cl)	Rat	Not known		No evidence for reproductive toxicity.
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	NOAEL	Teratogenic effects	25	Rat	Non guideline test		

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure Time (days)	Specific effects & organs affected
Sodium Hydroxide		No data available				
Sodium Hypochlorite	NOAEL	50	Rat	Method not given	90	
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	NOAEL	13		OECD 422, Oral		

Sub-chronic dermal toxicity

Ingredient(s)	End point	Value (mg/kg bw/d)	Species	Method	Exposure Time (days)	Specific effects & organs affected
Sodium Hydroxide		No data available				
Sodium Hypochlorite		No data available				
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides		No data available				

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Sub-chronic inhalation toxicity

Ingredient(s)	End point	Value (mg/kg bw/d)	Species	Method	Exposure Time (days)	Specific effects & organs affected
Sodium Hydroxide		No data available				
Sodium Hypochlorite		No data available				
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides		No data available				

Chronic toxicity

Ingredient(s)	Exposure Route	End point	Value (mg/kg bw/d)	Species	Method	Exposure Time	Specific effects & organs affected	Remark
Sodium Hydroxide			No data available					
Sodium Hypochlorite			No data available					
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides			No data available					

STOT – Single Exposure

Ingredient(s)	Affected Organ(s)
Sodium Hydroxide	No data available
Sodium Hypochlorite	No data available
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	No data available

STOT – Repeated Exposure

Ingredient(s)	Affected Organ(s)
Sodium Hydroxide	No data available
Sodium Hypochlorite	No data available
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	No data available

Aspiration hazard: Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms: Effects and symptoms related to the product, if any, are listed in subsection 4.2.

12. ECOLOGICAL INFORMATION

Toxicity

No data is available on the mixture.
Substance data, where relevant and available, are listed below

Aquatic short-term toxicity

Aquatic short-term toxicity – fish

Ingredient(s)	End point	Value (mg/l)	Species	Method	Exposure time (h)
Sodium Hydroxide	LC_{50}	35	Various species	Method not given	96
Sodium Hypochlorite	LC_{50}	0.06	Various species	Method not given	96
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	LC_{50}	>2.67 – 3.46	Fish	OECD 203, Static	96

Aquatic short-term toxicity – crustacea

Ingredient(s)	End point	Value (mg/l)	Species	Method	Exposure time (h)
Sodium Hydroxide	EC_{50}	40.4	Ceriodaphnia sp.	Method not given	48
Sodium Hypochlorite	EC_{50}	0.026	Not specified	Method not given	48
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	EC_{50}	3.1	Daphnia Magna Straus	OECD 202	48

Aquatic short-term toxicity – algae

Ingredient(s)	End point	Value (mg/l)	Species	Method	Exposure time (h)
Sodium Hydroxide	EC_{50}	22	Photobacterium phosphoreum	Method not given	0.25
Sodium Hypochlorite	NOEC	0.0021	Not specified	Method not given	168
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	EC_{50}	0.1428	Not specified	Method not given	72

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Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure Time (h)
Sodium Hydroxide		No data available			
Sodium Hypochlorite		No data available			
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	End point	Value (mg/l)	Inoculum	Method	Exposure time
Sodium Hydroxide		No data available			
Sodium Hypochlorite		0.375	Activated sludge	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	EC_{10}	>24	Bacteria	Non guideline test	18 hours

Aquatic long-term toxicity

Aquatic long-term toxicity – fish

Ingredient(s)	End point	Value (mg/l)	Species	Method	Exposure time	Effects Observed
Sodium Hydroxide		No data available				
Sodium Hypochlorite	NOEC	0.04	Menidia Pelinsulae	Method not given	96 hrs	
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	NOEC	0.42	Not specified		302 days	

Aquatic long-term toxicity – crustacea

Ingredient(s)	End point	Value (mg/l)	Species	Method	Exposure time	Effects Observed
Sodium Hydroxide		No data available				
Sodium Hypochlorite		No data available				
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	NOEC	0.7	Daphnia Magna	Method not given	21 days	

Aquatic Toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:-

Ingredient(s)	End point	Value (mg/kg dw sediment)	Species	Method	Exposure time	Effects Observed
Sodium Hydroxide		No data available				
Sodium Hypochlorite		No data available				
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides		No data available				

Terrestrial Toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:
Terrestrial toxicity - plants, if available:
Terrestrial toxicity - birds, if available:
Terrestrial toxicity - beneficial insects, if available:
Terrestrial toxicity - soil bacteria, if available:

Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half Life Time	Method	Evaluation	Remark
Sodium Hydroxide	13 seconds	Method not given	Rapidly Photodegradable	
Sodium Hypochlorite	115 days	Indirect photo oxidation		

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
Sodium Hydroxide					Not applicable (inorganic substance)
Sodium Hypochlorite					Not applicable (inorganic substance)
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides		CO2 Production	90% in 28 days	OECD 301B	Readily biodegradable

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Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
Sodium Hydroxide	No data available		Not relevant, does not bioaccumulate	
Sodium Hypochlorite	-3.42	Method not given	No bioaccumulation expected	
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	0.93	(EC) 440/2008, A.8	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
Sodium Hydroxide	No data available				
Sodium Hypochlorite	No data available				
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	No data available				

Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption Coefficient Log Koc(des)	Method	Sediment / Soil type	Evaluation
Sodium Hydroxide	No data available				Mobile in soil
Sodium Hypochlorite	1.12				High potential for mobility in soil
Amines, C12-14 (even numbered)-alkyldimethyl N-oxides	No data available				Low mobility in soil

Results of PBT and vPvB assessment: Substances that fulfil the criteria for PBT/vPvB, if any, are listed in section 3.
Other adverse effects: No other adverse effects known.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Waste from residues/unused Products: The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.
European Waste Catalogue: 20 01 15* - alkalines
Empty Packaging Recommendation: Dispose of observing national or local regulations.
Suitable cleaning agents: Water, if necessary with cleaning agent.

14. TRANSPORT INFORMATION

ADR, RID, ADN, IMO/IMDG, ICAO/IATA

UN number: 1719
UN proper shipping name: Caustic alkali liquid N.O.S (sodium hydroxide, hypochlorite)

Transport hazard class(es)

Class: 8
Label(s): 8
Packing group: II

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Environmental hazards
Environmentally hazardous: Yes
Marine pollutant: Yes

Special precautions for user: None known.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: The product is not transported in bulk tankers.

Other Relevant Information
ADR
Classification Code: C5
Tunnel restriction code: E
Hazard identification number: 80

IMO/IMDG
EmS: F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code. Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

15. REGULATORY INFORMATION

Safety, Health And Environmental Regulations/Legislation Specific For The Substance Or Mixture

Authorisations or restrictions (Regulation EC No. 1907/2006, Title VII respectively Title VIII): Not applicable

Ingredients according to EC Detergents Regulation 648/2004
Chlorine based bleaching agents, Nonionic surfactants, Polycarboxylates,, soap < 5%

Chemical safety assessment: A chemical safety assessment has not been carried out on the mixture

16. OTHER INFORMATION

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract.

MSDS Code: MSDS1774
Revision 8th October 2014
Reason for Revision: Design adjusted in accordance with Amendment 453/2010, Annex II of Regulation (EC) No 1907/2006.

Classification procedure: The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Full Text of R, H & EUH Phrases In Section 3:

R22	Harmful if swallowed
R31	Contact with acids liberates toxic gas
R34	Causes burns
R35	Causes severe burns
R37	Irritating to respiratory system
R38	Irritating to skin
R41	Risk of serious damage to eyes
R50	Very toxic to aquatic organisms
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation.
H318	Causes severe eye damage

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H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
EUH031 Contact with acids liberates toxic gas.

Abbreviations & Acronyms:

AISE The International Association for Soaps, Detergents & Maintenance Products
ATE Acute Toxicity Estimate.
DNEL Derived No Effect Limit
EUH CLP Specific Hazard Statement
PBT Persistent, Bioaccumulative and Toxic
PNEC Predicted No Effect Concentration
REACH No. REACH Registration No, without supplier specific part
vPvB very Poisonous very Bioaccumulative

End of Safety Data Sheet