

## SAFETY DATA SHEET

NOVADAN®

VIP 3

NOVADAN®

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued 22.02.2012

Revision date 26.04.2021

**1.1. Product identifier**

Product name VIP 3

UFI 8FD1-H0H2-D008-J20F

Article no. 55460

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

Product group Alkaline cleaning agent with chlorine.

Main intended use PC-CLN-OTH Other cleaning, care and maintenance products (excludes biocidal products)

Relevant identified uses  
SU1 Agriculture, forestry, fishery  
PC35 Washing and cleaning products (including solvent based products)  
PROC2 Use in closed, continuous process with occasional controlled exposure  
PROC8a Transfer of substance or mixture (charging and discharging) at nondedicated facilities  
PROC19 Manual activities involving hand contact.  
ERC8A Wide dispersive indoor use of processing aids in open systems

Uses advised against No specific uses advised against are identified.

**1.3. Details of the supplier of the safety data sheet****Producer**

Company name Novadan ApS

Postal address Platinvej 21

Postcode DK-6000

City Kolding

Country Danmark

Telephone number + 45 76 34 84 00

Fax + 45 75 50 43 70

Email	sds@novadan.dk
Website	www.novadan.dk

## 1.4. Emergency telephone number

Emergency telephone	Description: UK: NHS: 111 El: National Poisons Information Centre, 24/7: 01 809 2166
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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Skin Corr. 1A; H314; Calculation method Eye Dam. 1; H318; Calculation method STOT SE 3; H335; Calculation method Aquatic Chronic 4; H411; Calculation method EUH 031; Calculation method
Substance / mixture hazardous properties	For further information, please refer to section 11.
Additional information on classification	The informations stated in this MSDS, applies for the concentrated product. See Sec. 16, for informations regarding recommended user solutions

### 2.2. Label elements

#### Hazard pictograms (CLP)



Composition on the label	Disodium metasilicate, pentahydrate, Troclosen sodium, dihydrate
Signal word	Danger
Hazard statements	H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H411 Toxic to aquatic life with long lasting effects. EUH 031 Contact with acids liberates toxic gas.
Precautionary statements	P280 Wear protective gloves / protective clothing / eye protection / face protection. P303+P361+P353 IF ON SKIN (or hair): Remove / 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 or doctor / physician. P273 Avoid release to the environment.

### 2.3. Other hazards

Physicochemical effects	Contact with acids liberates toxic gas.
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Health effect	Corrosive to skin and eyes. May cause permanent damage to the eyes, especially if the product is not washed away IMMEDIATELY. Inhalation of dust may irritate the respiratory system.
Environmental effects	The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See section 12 as well. Substantial amounts of the product may lead to a local change in acidity in small water systems which may have adverse effects on aquatic organisms. This product does not contain any PBT or vPvB substances.
Other hazards	No evidence for endocrine disrupting properties.

## SECTION 3: Composition / information on ingredients

### 3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Sodium carbonate	CAS No.: 497-19-8 EC No.: 207-838-8 Index No.: 011-005-00-2 REACH Reg. No.: 01-211-9485498-19	Eye Irrit. 2; H319	30 - 60 %	
Disodium metasilicate, pentahydrate	CAS No.: 10213-79-3 EC No.: 229-912-9 REACH Reg. No.: 01-2119449811-37-xxxx	Skin Corr. 1B; H314 Eye Dam. 1; H318 Met. Corr. 1; H290 STOT SE 3; H335	15 - 30 %	
Troclosene sodium, dihydrate	CAS No.: 51580-86-0 Index No.: 613-030-01-7	Acute tox. 4; H302; Eye Irrit. 2; H319; STOT SE 3; H335; Aquatic Acute 1; H400; M-factor 1; Aquatic Chronic 1; H410; M-factor 1;	5 - 15 %	
Substance comments	Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents: 15-30%: phosphates , 5-15%: Chlorine-containing bleaching agent. , <5%: nonionic surfactant . The full text for all hazard statements is displayed in section 16.			

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

General	Remove affected person from source of contamination.
Inhalation	Move injured person into fresh air and keep person calm under observation. If uncomfortable: Seek hospital and bring these instructions. In case of chlorine poisoning: Move injured person to fresh air and after that to hospital.
Skin contact	Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if any discomfort continues.
Eye contact	Immediately flush with plenty of water for up to 15 minutes. Remove any contact

	lenses and open eyes wide apart. Make sure to remove any contact lenses from the eyes before rinsing. Immediately transport to hospital or eye specialist. Continue flushing during transport to hospital.
Ingestion	Immediately rinse mouth and drink plenty of water. Call an ambulance. Bring along these instructions. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Do not give victim anything to drink if he is unconscious.
Recommended personal protective equipment for first aid responders	Wear necessary protective equipment. For personal protection, see section 8.

## 4.2. Most important symptoms and effects, both acute and delayed

Acute symptoms and effects	Corrosive. Prolonged contact causes serious tissue damage. Strongly corrosive. Causes severe burns and serious eye damage. Immediate first aid is imperative. Dust irritates the respiratory system, and may cause coughing and difficulties in breathing.
Delayed symptoms and effects	The etching penetrates deeply into the tissue and is first noticed after a while.

## 4.3. Indication of any immediate medical attention and special treatment needed

Other information	In case of unconsciousness, ingestion or eye contact: Immediately call a doctor / ambulance. Show this safety data sheet.
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# SECTION 5: Firefighting measures

## 5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
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## 5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	This product is not flammable. During fire, gases hazardous to health may be formed. Water used for fire extinguishing, which has been in contact with the product, may be corrosive.
Hazardous combustion products	Toxic gases/vapours/fumes of: Chlorine. Hydrogen chloride (HCl).

## 5.3. Advice for firefighters

Personal protective equipment	Wear necessary protective equipment. For personal protection, see section 8.
Fire fighting procedures	Reference is made to the company fire procedure. If risk of water pollution occurs, notify appropriate authorities. Avoid breathing fire vapours.

# SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Look out! The product is corrosive. Use protective gloves, goggles and suitable protective clothing. Avoid inhalation of dust. In case of inadequate ventilation use suitable respirator. For personal protection, see section 8.
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## 6.2. Environmental precautions

Environmental precautionary measures

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment.

## 6.3. Methods and material for containment and cleaning up

Cleaning method

Collect spillage with shovel, broom or the like.  
Wash contaminated area with water.

## 6.4. Reference to other sections

Other instructions

See section 8 and section 13.

# SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

Handling

Avoid inhalation of dust and contact with skin and eyes. Do not mix with acidic products. Use work methods which minimize spreading of vapours, dust, smoke, aerosols, splashes etc. to the extent technically possible.

## Protective safety measures

Advice on general occupational hygiene

Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.  
Eating, smoking and water fountains prohibited in immediate work area.  
Take off contaminated clothing and personal protective equipment before entering an eating area..

## 7.2. Conditions for safe storage, including any incompatibilities

Storage

Store in tightly closed original container. Keep away from food, drink and animal feeding stuffs. Store protected from acids. Store the product away from direct sunlight in opaque containers.

## Conditions for safe storage

Storage temperature

Value: 0 - 35 °C

Storage stability

Durability: 12 months.

## 7.3. Specific end use(s)

Specific use(s)

The identified uses for this product are detailed in Section 1.2.

# SECTION 8: Exposure controls / personal protection

## 8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Chlorine	CAS No.: 7782-50-5	<b>Limit value (short term)</b> Value: 0,5 ppm <b>Limit value (short term)</b> Value: 1,5 mg/m³	

**DNEL / PNEC**

Substance	Sodium carbonate
DNEL	<b>Group:</b> Worker <b>Route of exposure:</b> Long term (repeated) - Inhalation <b>Value:</b> 10 mg/m <sup>3</sup> <b>Reference:</b> Supplier MSDS
Substance	Disodium metasilicate, pentahydrate
DNEL	<b>Group:</b> Professional <b>Route of exposure:</b> Long-term inhalation (systemic) <b>Value:</b> 6,22 mg/m <sup>3</sup>  <b>Group:</b> Consumer <b>Route of exposure:</b> Long-term inhalation (systemic) <b>Value:</b> 1,55 mg/m <sup>3</sup>  <b>Group:</b> Consumer <b>Route of exposure:</b> Long-term oral (systemic) <b>Value:</b> 0,74 mg/kg bw/d  <b>Group:</b> Professional <b>Route of exposure:</b> Long-term dermal (systemic) <b>Value:</b> 1,49 mg/kg bw/d  <b>Group:</b> Consumer <b>Route of exposure:</b> Long-term dermal (systemic) <b>Value:</b> 0,74 mg/kg bw/d
PNEC	<b>Route of exposure:</b> Freshwater <b>Value:</b> 7,5 mg/l  <b>Route of exposure:</b> Saltwater <b>Value:</b> 1 mg/l  <b>Route of exposure:</b> Water <b>Value:</b> 7,5 mg/l  <b>Route of exposure:</b> Sewage treatment plant STP <b>Value:</b> 1000 mg/l

**8.2. Exposure controls****Safety signs****Precautionary measures to prevent exposure**

Appropriate engineering controls	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. An eye wash bottle must be available at the work site.
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**Eye / face protection**

Suitable eye protection

Wear dust resistant safety goggles where there is danger of eye contact. EN 166.

## Hand protection

Skin- / hand protection, long term contact

Use protective gloves made of:  
Butyl rubber.  $\geq 0,5$  mm  
Neoprene.  $\geq 0,5$  mm  
Nitrile.  $\geq 0,4$  mm  
EN 374.

Breakthrough time

Value:  $\geq 480$  minute(s)

Hand protection, comments

Manufacturer's directions for use should be observed because of great diversity of types.  
The recommendation is a qualified estimate based on knowledge of the components.

## Skin protection

Additional skin protection measures

Wear apron or protective clothing in case of contact.

## Respiratory protection

Respiratory protection necessary at

In case of inadequate ventilation use suitable respirator. Wear respiratory protection with combination filter (dust and gas filter). Type B/P2. EN 143/EN149.

## Thermal hazards

Thermal hazards

See section 5.

## Appropriate environmental exposure control

Environmental exposure controls

See section 6.

# SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state

Powder, dust.

Colour

White.

Odour

Chlorine.

pH

Status: In aqueous solution  
Value:  $\sim 12,0$   
Comments: 0 °dH  
Concentration: 10 %

Status: In aqueous solution  
Value:  $\sim 11,0$   
Comments: 0 °dH  
Concentration: 0,5 %

Melting point / melting range

Comments: Not relevant.

Boiling point / boiling range	Comments: Not relevant.
Flash point	Comments: Not relevant.
Evaporation rate	Comments: Not relevant.
Explosion limit	Comments: Not relevant.
Vapour pressure	Comments: Not relevant.
Vapour density	Comments: Not relevant.
Relative density	Comments: Not relevant.
Bulk density	Value: ~ 0,95 kg/l.
Solubility	Medium: Water Comments: Completely soluble in water.
Partition coefficient: n-octanol/ water	Comments: Not relevant.
Auto-ignition temperature	Comments: Not relevant.
Decomposition temperature	Comments: Not relevant.
Viscosity	Comments: Not relevant.
Explosive properties	Not explosive.
Oxidising properties	Does not meet the criteria for oxidising.

## 9.2. Other information

### 9.2.2. Other safety characteristics

Comments	No data recorded.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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### 10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
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### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Generates toxic gas when in contact with acid. Reacts violently with strong acids. Risk of bumping (splashes).
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### 10.4. Conditions to avoid

Conditions to avoid	Water, moisture, acids and heating.
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### 10.5. Incompatible materials

Materials to avoid	Strong acids. Acids, oxidising. Alkali-sensitive metals such as aluminium, tin, lead and zinc and alloys with these metals.
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## 10.6. Hazardous decomposition products

Hazardous decomposition products

In case of fire, toxic gases (CO, CO<sub>2</sub>, NO<sub>x</sub>) may be formed.  
Chlorine gas and hydrogen chloride may be formed in a fire or by heating.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Substance

Sodium carbonate

Acute toxicity

**Type of toxicity:** Acute

**Effect tested:** LD50

**Route of exposure:** Oral

**Value:** 2800 mg/kg

**Animal test species:** Rat

**Comments:** Supplier MSDS

**Type of toxicity:** Acute

**Effect tested:** LC50

**Route of exposure:** Inhalation.

**Duration:** 2h

**Value:** 0,8 mg/l

**Animal test species:** guinea pig

**Comments:** Supplier MSDS

**Type of toxicity:** Acute

**Effect tested:** LC50

**Route of exposure:** Inhalation.

**Duration:** 2h

**Value:** 1,2 mg/l

**Animal test species:** Mice

**Comments:** Supplier MSDS

**Type of toxicity:** Acute

**Effect tested:** LC50

**Route of exposure:** Inhalation.

**Duration:** 2h

**Value:** 2,3 mg/l

**Animal test species:** Rat

**Comments:** Supplier MSDS

**Type of toxicity:** Acute

**Effect tested:** LD50

**Route of exposure:** Dermal

**Value:** > 2000 mg/kg

**Animal test species:** Rabbit

**Comments:** Supplier MSDS

Substance

Disodium metasilicate, pentahydrate

Acute toxicity

**Effect tested:** LD50

**Route of exposure:** Oral

**Value:** 1152 -1349 mg/kg

**Animal test species:** Rat

**Effect tested:** LC50

	<b>Route of exposure:</b> Inhalation. <b>Value:</b> > 2,06 g/m <sup>3</sup> <b>Animal test species:</b> Rat  <b>Effect tested:</b> LD50 <b>Route of exposure:</b> Dermal <b>Value:</b> > 5000 mg/kg
Other toxicological data	Toxicological tests on the product has not been performed.

## Other information regarding health hazards

Assessment of acute toxicity, classification	No evidence for acute toxicity.
Inhalation	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing.
Skin contact	Strongly corrosive. May cause deep tissue damage.
Eye contact	Strongly corrosive. Causes severe burns. Immediate first aid is imperative. May cause permanent damage to the eyes, especially if the product is not washed away IMMEDIATELY.
Ingestion	Strongly corrosive. Even small amounts may be fatal. Symptoms are severe burning pains in mouth, throat and stomach.
Sensitisation	No evidence for respiratory nor skin sensitization.
Assessment of germ cell mutagenicity, classification	No evidence for germ cell mutagenicity.
Assessment of carcinogenicity, classification	No evidence for carcinogenicity.
Assessment of reproductive toxicity, classification	No evidence for reproductive toxicity.
Assessment of specific target organ toxicity - single exposure, classification	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing.
Substance	Disodium metasilicate, pentahydrate
Specific target organ toxicity - repeated exposure, test results	<b>Method:</b> NOAEL <b>Route of exposure:</b> Oral <b>Dose:</b> 227 mg/kg bw /d <b>Species:</b> Rat <b>Evaluation result:</b> Negative.
Assessment of specific target organ toxicity - repeated exposure, classification	No evidence for STOT-repeated exposure.
Assessment of aspiration hazard, classification	No evidence for aspiration hazard.

## 11.2 Other information

Endocrine disruption	No evidence for endocrine disrupting properties.
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## SECTION 12: Ecological information

## 12.1. Toxicity

Substance	Sodium carbonate
Aquatic toxicity, fish	<b>Value:</b> 300 mg/l <b>Test duration:</b> 96H <b>Species:</b> Lepomis macrochirus <b>Method:</b> LC50
Substance	Disodium metasilicate, pentahydrate
Aquatic toxicity, fish	<b>Toxicity type:</b> Acute <b>Value:</b> 210 mg/l <b>Test duration:</b> 96 hour(s) <b>Species:</b> Brachydanio rerio
Substance	Sodium carbonate
Aquatic toxicity, crustacean	<b>Value:</b> 200 - 227 mg/l <b>Test duration:</b> 48H <b>Species:</b> Ceriodaphnia dubia <b>Method:</b> EC50
Substance	Disodium metasilicate, pentahydrate
Aquatic toxicity, crustacean	<b>Toxicity type:</b> Acute <b>Value:</b> 1700 mg/l <b>Test duration:</b> 48 hour(s) <b>Species:</b> Daphnia magna <b>Method:</b> EC50
Ecotoxicity	<p>Contains a substance (Aquatic Acute 1; H400 or Aquatic Chronic 1; H410) that falls within the scope of the multiplication factor rule.</p> <p>Large amounts of the product may affect the acidity (pH-factor) in water with possible risk of harmful effects to aquatic organisms.</p>

## 12.2. Persistence and degradability

Persistence and degradability description/evaluation	The product is easily biodegradable.
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## 12.3. Bioaccumulative potential

Bioaccumulation, evaluation	The product is not bioaccumulating.
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## 12.4. Mobility in soil

Mobility	The product is water soluble and may spread in water systems.
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## 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Not Classified as PBT/vPvB by current EU criteria.
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## 12.6. Endocrine disrupting properties

Endocrine disrupting properties	No evidence for endocrine disrupting properties.
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## 12.7. Other adverse effects

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Do not empty into drains; dispose of this material and its container at hazardous or special waste collection point. Dispose of waste and residues in accordance with local authority requirements. -
Appropriate methods of disposal for the contaminated packaging	Dispose unused product and the packaging in accordance with local requirements.
EWC waste code	EWC waste code: 0706 wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics Classified as hazardous waste: Yes
EWL packing	EWC waste code: 0706 wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics Classified as hazardous waste: Yes
Other information	Waste code applies to product remnants in pure form. When handling waste, consideration should be made to the safety precautions applying to handling of the product.

## SECTION 14: Transport information

Dangerous goods	Yes
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### 14.1. UN number

ADR/RID/ADN	3253
IMDG	3253
ICAO/IATA	3253

### 14.2. UN proper shipping name

Proper shipping name English	DISODIUM TRIOXOSILICATE
ADR/RID/ADN	
ADR/RID/ADN	DISODIUM TRIOXOSILICATE
IMDG	DISODIUM TRIOXOSILICATE
ICAO/IATA	DISODIUM TRIOXOSILICATE

### 14.3. Transport hazard class(es)

ADR/RID/ADN	8
Classification code ADR/RID/ADN	C6

### 14.4. Packing group

ADR/RID/ADN	III
IMDG	III
ICAO/IATA	III

## 14.5. Environmental hazards

ADR/RID/ADN	Danger label for "Environmental hazard" should be used if packagings with more than 5 liters or 5 kilos are transported.
IMDG	Danger label for "Environmental hazard" should be used if packagings with more than 5 liters or 5 kilos are transported.
IMDG Marine pollutant	Yes
Comments	Marine pollutant component: Troclosene sodium, dihydrat.

## 14.6. Special precautions for user

Special safety precautions for user Not relevant.

## 14.7. Maritime transport in bulk according to IMO instruments

Product name	DISODIUM TRIOXOSILICATE
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### Additional information

Hazard label ADR/RID/ADN	8
Hazard label IMDG	8
Hazard label ICAO/IATA	8

### ADR/RID Other information

Tunnel restriction code	E
Transport category	3
Hazard No.	80

### IMDG Other information

EmS	F-A, S-B
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## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

Other label information	For professional users only. As a general rule, persons under 18 years of age are not allowed to work with this product. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.
Legislation and regulations	The Management of Health and Safety at Work Regulations 1999 (SI 1999 No. 3242), with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and

2000/21/EC, including amendments.

The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).  
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents.

## 15.2. Chemical safety assessment

Chemical safety assessment performed

No

## SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)

EUH 031 Contact with acids liberates toxic gas.  
H270 May cause or intensify fire; oxidiser.  
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.  
H331 Toxic if inhaled.  
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.

Training advice

No particular training or education is required but the user must be familiar with this SDS. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.

Additional information

READY-TO-USE MIXTURE: 0,4-0,6%: Does not require a hazard warning label.

Information added, deleted or revised

Change to Sections: 1, 2, 3, 7, 8, 11, 12, 13, 16

Version

1

Prepared by

ALM