

SAFETY DATA SHEET

NOVADAN®

Foam 19 T

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 06.02.2019

Revision date 17.01.2022

1.1. Product identifier

Product name Foam 19 T

UFI 3P01-50XP-E00F-X95M

Article no. 12788, 12789, 12791, 13100

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

Use of the substance / preparation Acid Foam cleaning agent.

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

Relevant identified uses
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
SU4 Manufacture of food products
PC35 Washing and cleaning products (including solvent based products)
PROC11 Non-industrial spraying
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
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1.4. Emergency telephone number

Emergency telephone	Description: UK: NHS: 111 EI: 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]	Met. Corr. 1; H290; On basis of test data Skin Corr. 1B; H314; Calculation method Eye Dam. 1; H318; 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	Phosphoric Acid, Acetic acid
Signal word	Danger
Hazard statements	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage.
Precautionary statements	P261 Avoid breathing spray/mist. 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.

2.3. Other hazards

Physicochemical effects	In contact with compounds containing chlorine, toxic gases may form. Generates strong heat in contact with alkaline compounds, risk of bumping.
Health effect	Corrosive to skin and eyes. May cause permanent damage to the eyes, especially if the product is not washed away IMMEDIATELY. In high concentrations, vapours and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. See section 11 for additional information on health hazards.
Environmental effects	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.

Undiluted, the product may be corrosive to metals.

When used in the recommended dosages, contact time and temperature, the product is compatible with acid-proof stainless steels.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Phosphoric Acid	CAS No.: 7664-38-2 EC No.: 231-633-2 Index No.: 015-011-00-6 REACH Reg. No.: 01-2119485924-24-XXXX	Skin Corr. 1B; H314 Eye Dam. 1; H318 Met. Corr. 1; H290 Additional information on classification: Eye Irrit. 2; H319: 10 % ≤ C < 25 % Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Note : E	15 - 30 %	
(2-Methoxymethylethoxy) propanol	CAS No.: 34590-94-8 EC No.: 252-104-2 REACH Reg. No.: 01-2119450011-60-xxxx		5 - -15 %	
Acetic acid	CAS No.: 64-19-7 EC No.: 200-580-7 Index No.: 607-002-00-6 REACH Reg. No.: 01-2119475328-30-XXXX	Flam. Liq. 3; H226 Skin Corr. 1A; H314 CLP classification, notes: B Additional information on classification: SCL: Eye Irrit. 2; H319: 10 % ≤ C < 25 % Skin Corr. 1A; H314: C ≥ 90 % Skin Corr. 1B; H314: 25 % ≤ C < 90 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Note : E	1 - 5 %	
Nitric acid	CAS No.: 7697-37-2 EC No.: 231-714-2 Index No.: 007-004-00-1 REACH Reg. No.: 01-2119487297-23-xxxx	Met. Corr. 1; H290 Skin Corr. 1A; H314 Ox. Liq. 2; H272 Eye Dam. 1; H318 Acute Tox. 3; H331 EUH 071 Additional information on classification: SCL: Skin Corr./Irrit. 1A: ≥ 20 % Skin Corr./Irrit. 1B: 5 ≤ 20 % Ox. Liq. 2: ≥ 99 %	1 - 5 %	

Amines, C12-14 (even numbered) - alkyldimethyl, N-oxides	CAS No.: 308062-28-4 EC No.: 931-292-6 REACH Reg. No.: 01-2119490061-47-xxxx	Ox. Liq. 3: 65 < 99% Acute Tox 3: > 26% Acute Tox 4: 12,8% ≤ 26%	
		Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	1 - 5 %
Citric acid, monohydrate	CAS No.: 5949-29-1 EC No.: 201-069-1 REACH Reg. No.: 01-2119457026-42-xxxx	Eye Irrit. 2; H319	1 - 5 %

Substance comments

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Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents:

<5%: cationic surfactant , nonionic surfactant , anionic 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.
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	Important! Immediately rinse with water for at least 15 minutes. May cause permanent damage if eye is not immediately irrigated. 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	Strongly corrosive. Causes severe burns and serious eye damage. Immediate first aid is imperative.
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.
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5.3. Advice for firefighters

Personal protective equipment	Wear necessary protective equipment. For personal protection, see section 8.
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Fire fighting procedures	Reference is made to the company fire procedure. If risk of water pollution occurs, notify appropriate authorities. Avoid breathing fire vapours.
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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. 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 discharge into water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment.
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6.3. Methods and material for containment and cleaning up

Cleaning method	Dam and absorb spillage with sand, sawdust or other absorbent. Wash contaminated area with water.
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6.4. Reference to other sections

Other instructions	See section 8 and section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Avoid inhalation of vapours and contact with skin and eyes. Do not mix with hypochlorite containing products: toxic chlorine vapors may be formed. Use work methods which minimize spreading of vapours, dust, smoke, aerosols, splashes etc. to the extent technically possible.
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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.
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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 away from: Chlorine and Alkalies.

Conditions for safe storage

Storage temperature Value: -15 - 35 °C.

Storage stability Durability: 36 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
Phosphoric Acid	CAS No.: 7664-38-2	Limit value (8 h) : 1 mg/m ³	TWA Year: 2018
(2-Methoxymethylethoxy) propanol	CAS No.: 34590-94-8	Limit value (8 h) : 50 ppm Limit value (8 h) : 308 mg/m ³ Exposure limit letter Letter code: Sk	
Acetic acid	CAS No.: 64-19-7	Limit value (8 h) : 20 ppm Limit value (8 h) : 25 mg/m ³ Limit value (short term) Value: 20 ppm Limit value (short term) Value: 50 mg/m ³	TWA Year: 2018
Nitric acid	CAS No.: 7697-37-2	Limit value (8 h) : 2,6 mg/m ³ Limit value (8 h) : 1 ppm	

DNEL / PNEC

Substance

Phosphoric Acid

DNEL

Group: Professional

Route of exposure: Long-term inhalation (local)

Value: 1 mg/m³

Group: Professional

Route of exposure: Long-term inhalation (systemic)

Value: 10,7 mg/m³

Group: Professional

Route of exposure: Acute inhalation (local)

Value: 2 mg/m³

Substance

Group: Consumer
Route of exposure: Long-term oral (systemic)
Value: 0,1 mg/kg bw/d

Group: Consumer
Route of exposure: Long-term inhalation (systemic)
Value: 4,57 mg/m³

Group: Consumer
Route of exposure: Long-term oral (local)
Value: 0,36 mg/m³

(2-Methoxymethylethoxy) propanol

DNEL

Group: Professional
Route of exposure: Long-term inhalation (systemic)
Value: 308 mg/m³

Group: Consumer
Route of exposure: Long-term oral (systemic)
Value: 36 mg/kg bw/day

Group: Professional
Route of exposure: Long-term dermal (systemic)
Value: 283 mg/kg bw/day

Group: Consumer
Route of exposure: Long-term inhalation (systemic)
Value: 37,2 mg/m³

Group: Consumer
Route of exposure: Long-term dermal (systemic)
Value: 121 mg/kg bw/day

PNEC

Route of exposure: Freshwater
Value: 19 mg/l

Route of exposure: Saltwater
Value: 1,9 mg/l

Route of exposure: Sewage treatment plant STP
Value: 4168 mg/l

Route of exposure: Freshwater sediments
Value: 70,2 mg/kg

Route of exposure: Saltwater sediments
Value: 7,02 mg/kg

Route of exposure: Soil
Value: 2,74 mg/kg

Substance

Acetic acid

DNEL

Group: Consumer
Route of exposure: Acute inhalation (local)
Value: 25 mg/m³

Group: Professional

	<p>Route of exposure: Acute inhalation (local) Value: 25 mg/m³</p> <p>Group: Consumer Route of exposure: Long-term inhalation (local) Value: 25 mg/m³</p> <p>Group: Professional Route of exposure: Long-term inhalation (local) Value: 25 mg/m³</p>
PNEC	<p>Route of exposure: Freshwater Value: 3,058 mg/l</p> <p>Route of exposure: Saltwater Value: 0,3058 mg/l</p> <p>Route of exposure: Freshwater sediments Value: 11,36 mg/kg</p> <p>Route of exposure: Saltwater sediments Value: 1,136 mg/kg</p> <p>Route of exposure: Sewage treatment plant STP Value: 85 mg/l</p> <p>Value: 11,36 mg/l Reference: intermittent release</p>
Substance	Nitric acid
DNEL	<p>Group: Professional Route of exposure: Acute inhalation (local) Value: 2,6 mg/m³</p> <p>Group: Professional Route of exposure: Long-term inhalation (local) Value: 1,3 mg/m³</p>
Substance	Amines, C12-14 (even numbered)- alkyldimethyl, N-oxides
DNEL	<p>Group: Professional Route of exposure: Long-term inhalation (systemic) Value: 6,2 mg/m³</p> <p>Group: Professional Route of exposure: Long-term dermal (systemic) Value: 11 mg/kg bw/day</p> <p>Group: Consumer Route of exposure: Long-term inhalation (systemic) Value: 1,53 mg/m³</p> <p>Group: Consumer Route of exposure: Long-term dermal (systemic) Value: 5,5 mg/kg bw/day</p> <p>Group: Consumer</p>

PNEC

Route of exposure: Long-term oral (systemic)**Value:** 0,44 mg/kg bw/day**Route of exposure:** Freshwater**Value:** 0,034 mg/l**Route of exposure:** Saltwater**Value:** 0,003 mg/l**Route of exposure:** Freshwater sediments**Value:** 5,24 mg/kg dw**Route of exposure:** Saltwater sediments**Value:** 0,524 mg/kg dw**Route of exposure:** Soil**Value:** 1,02 mg/kg dw**Route of exposure:** Sewage treatment plant STP**Value:** 24 mg/l**Route of exposure:** Food products**Value:** 11,1 mg/kg

8.2. Exposure controls

Safety signs



Precautionary measures to prevent exposure

Technical measures to prevent exposure

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Provide eyewash, quick drench.

Eye / face protection

Suitable eye protection

Wear approved safety goggles. EN 166.

Hand protection

Skin- / hand protection, long term contact

Use protective gloves made of:
Butyl rubber. $\geq 0,7$ mm
Neoprene. $\geq 0,5$ mm
EN 374.

Breakthrough time

Value: ≥ 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.
Wear rubber footwear.

Respiratory protection

Respiratory protection necessary at

In case of inadequate ventilation use suitable respirator. Type A2/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	Liquid.
Colour	Colourless.
Odour	Characteristic.
Odour limit	Comments: Not relevant.
pH	Status: In delivery state Value: < 1,0 Status: In aqueous solution Value: ~ 1,5 Comments: 15°dH Concentration: 5 % Status: In aqueous solution Value: ~ 2 Comments: 15°dH Concentration: 2 %
Melting point / melting range	Comments: Not relevant.
Boiling point / boiling range	Comments: Not relevant.
Flash point	Comments: Not relevant.
Evaporation rate	Comments: Not relevant.
Flammability	Not relevant.
Explosion limit	Comments: Not relevant.
Vapour pressure	Comments: Not relevant.
Vapour density	Comments: No data recorded.
Particle characteristics	Comments: Not relevant.
Density	Value: ~ 1,15 g/ml

Solubility	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	Value: < 30 mPas.
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	Liberates toxic gases when mixed with chlorine containing products. Reacts with alkalis and generates heat. Reacts strongly with water. Do not add water directly to the product. It may cause a violent reaction. Risk of bumping (splashes).
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10.4. Conditions to avoid

Conditions to avoid	Strong alkalis. Chlorine containing products. Corrodes aluminum and other light metals, as well as zinc, brass, lead, tin, etc.
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10.5. Incompatible materials

Materials to avoid	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	During fire, toxic gases (CO, CO ₂ , NO _x) are formed.
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Other information

Other information	Undiluted, the product may be corrosive to metals. When used in the recommended dosages, contact time and temperature, the product is compatible with acid-proof stainless steels.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance	Phosphoric Acid
Acute toxicity	<p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Dermal Value: 2740 mg/kg Animal test species: Rabbit</p> <p>Type of toxicity: Acute Effect tested: LC50 Route of exposure: Inhalation. Duration: 1h Value: 3846 mg/l Animal test species: Rat</p> <p>Effect tested: LD50 Route of exposure: Oral Value: ~ 2600 mg/kg bw Animal test species: Rat Test reference: OECD 423</p>
Substance	(2-Methoxymethylethoxy) propanol
Acute toxicity	<p>Effect tested: LD50 Route of exposure: Oral Value: > 5000 mg/kg Animal test species: Rat</p> <p>Effect tested: LD50 Route of exposure: Dermal Value: > 5000 ml/kg Animal test species: Rabbit</p> <p>Effect tested: Lclo Route of exposure: Inhalation. (mist) Value: > 275 ppm Animal test species: Rat</p>
Substance	Acetic acid
Acute toxicity	<p>Effect tested: LD50 Route of exposure: Oral Duration: single dose Value: 3320 mg/kg Animal test species: Rat</p> <p>Effect tested: LD50 Route of exposure: Dermal Value: > 2000 mg/kg Animal test species: Rabbit</p> <p>Effect tested: LC50 Route of exposure: Inhalation. Duration: 4 hour(s)</p>

	Value: > 40000 mg/m ³ Animal test species: Mouse.
Substance	Nitric acid
Acute toxicity	Type of toxicity: Acute Effect tested: LC50 Route of exposure: Inhalation (vapour) Method: OECD 403 Duration: 4 hour(s) Value: > 2,65 mg/l Animal test species: Rat
Substance	Amines, C12-14 (even numbered)- alkyldimethyl, N-oxides
Acute toxicity	Effect tested: LD50 Route of exposure: Oral Value: 1064 mg/kg Animal test species: Rat
Substance	Citric acid, monohydrate
Acute toxicity	Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: 3000 mg/kg Animal test species: Rat Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: 5400 mg/kg Animal test species: Mice
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.
Substance	Phosphoric Acid
Skin corrosion / irritation test result	Toxicity type: Skin corrosion Method: Not known. Species: Rabbit. Evaluation result: Corrosive to skin.
Substance	Phosphoric Acid
Eye damage or irritation, test results	Toxicity type: Eye damage Method: Not known. Species: Not known. Evaluation result: Result: Corrosive to eyes.
Substance	Phosphoric Acid
Respiratory or skin sensitisation	Toxicity type: Skin sensitivity Method: Not known. Species: Not known.

	Evaluation result: Not Sensitising.
Inhalation	Aerosols may be corrosive.
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	May cause burns in mucous membranes, throat, oesophagus 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	No evidence for STOT-single exposure.
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.

Symptoms of exposure

Symptoms of overexposure	No specific symptoms noted.
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11.2 Other information

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

12.1. Toxicity

Substance	Phosphoric Acid
Aquatic toxicity, fish	Value: 98 - 106 mg/l Test duration: 96 hour(s) Species: Lepomis macrochirus
Substance	(2-Methoxymethylethoxy) propanol
Aquatic toxicity, fish	Value: > 10000 mg/l Test duration: 96 hour(s) Species: Pimephales promelas Method: LC50
Substance	Acetic acid
Aquatic toxicity, fish	Toxicity type: Acute Value: > 301 mg/l

	Test duration: 96 hour(s) Species: Oncorhynchus mykiss Method: LC50, OECD 203
Substance	Nitric acid
Aquatic toxicity, fish	Value: > 100 mg/l Test duration: 96h Species: Fish Method: LC50
Substance	Amines, C12-14 (even numbered)- alkyl dimethyl, N-oxides
Aquatic toxicity, fish	Toxicity type: Acute Value: 1,26 mg/l Exposure time: 96 hour(s) Species: Oncorhynchus mykiss Method: LC50, OECD 203 Toxicity type: Chronic Value: 0,42 mg/l Species: Pimephales promelas
Substance	Citric acid, monohydrate
Aquatic toxicity, fish	Value: 440-760 mg/L Test duration: 96h Species: Leuciscus idus Method: LC50
Substance	Phosphoric Acid
Aquatic toxicity, algae	Value: > 100 mg/l Test duration: 72 hour(s) Species: Desmodesmus subspicatus
Substance	(2-Methoxymethylethoxy) propanol
Aquatic toxicity, algae	Value: > 969 mg/l Exposure time: 72 hour(s) Species: Pseudokirchneriella subcapitata Method: EC50
Substance	Acetic acid
Aquatic toxicity, algae	Toxicity type: Acute Value: > 301 mg/l Test duration: 48 hour(s) Species: Skeletonema costatum Method: EC50, OECD 201
Substance	Amines, C12-14 (even numbered)- alkyl dimethyl, N-oxides
Aquatic toxicity, algae	Toxicity type: Acute Value: 0,19 mg/l Test duration: 72 hour(s) Species: Pseudokirchneriella subcapitata Method: ErC 50 Toxicity type: Chronic Value: 0,067 mg/l

	Test duration: 28 day(s) Species: Periphyton Method: NOEC
Substance	Citric acid, monohydrate
Aquatic toxicity, algae	Value: 640 mg/L Test duration: 168h Species: Scenedesmus quadricauda Method: EC0
Substance	Phosphoric Acid
Aquatic toxicity, crustacean	Value: > 100 mg/l Test duration: 48 hour(s) Species: Daphnia magna
Substance	(2-Methoxymethylethoxy) propanol
Aquatic toxicity, crustacean	Value: 1919 mg/l Exposure time: 48 hour(s) Species: Daphnia magna Method: EC50
Substance	Nitric acid
Aquatic toxicity, crustacean	Value: > 150 mg/l Test duration: 48h Method: LC50
Substance	Amines, C12-14 (even numbered)- alkyl dimethyl, N-oxides
Aquatic toxicity, crustacean	Toxicity type: Acute Value: 2,9 mg/l Exposure time: 48 hour(s) Species: Daphnia magna Method: EC50 OECD TG 202 Toxicity type: Chronic Value: 0,70 mg/l Exposure time: 21 day(s) Species: Daphnia magna Method: OECD 211 NOEC
Substance	Citric acid, monohydrate
Aquatic toxicity, crustacean	Value: 120 mg/L Test duration: 72h Species: Daphnia Magna Method: EC100
Ecotoxicity	<p>Large amounts of the product may affect the acidity (pH-factor) in water with possible risk of harmful effects to aquatic organisms.</p> <p>Not classified as dangerous to the environment.</p>

12.2. Persistence and degradability

Persistence and degradability description/evaluation

The product is easily biodegradable.

Substance	(2-Methoxymethylethoxy) propanol
Biodegradability	Value: 76 % Method: OECD 301F Test period: 28 day(s)
Substance	Amines, C12-14 (even numbered)- alkyldimethyl, N-oxides
Biodegradability	Value: 80 % Method: ISO 14593 Test period: 28 day(s)
Substance	Citric acid, monohydrate
Biodegradability	Value: 97% Method: OECD 301B Test period: 28d
Chemical oxygen demand (COD)	Value: < 250 mg O ₂ /g

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

Additional ecological information	No information.
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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: 070601 aqueous washing liquids and mother liquors Classified as hazardous waste: Yes
EWL packing	EWC waste code: 070601 aqueous washing liquids and mother liquors 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

14.1. UN number

ADR/RID/ADN 3265

IMDG 3265

ICAO/IATA 3265

14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Technical name/Danger releasing substance English ADR/RID/ADN Phosphoric acid, Acetic acid

ADR/RID/ADN CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Technical name/danger releasing substance ADR/RID/ADN Phosphoric acid, Acetic acid

IMDG CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Technical name/danger releasing substance IMDG Phosphoric acid, Acetic acid

ICAO/IATA CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Technical name/danger releasing substance ICAO/IATA Phosphoric acid, Acetic acid

14.3. Transport hazard class(es)

ADR/RID/ADN 8

Classification code ADR/RID/ADN C3

IMDG 8

ICAO/IATA 8

14.4. Packing group

ADR/RID/ADN III

IMDG III

ICAO/IATA III

14.5. Environmental hazards

IMDG Marine pollutant No

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 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

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.
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.
EH40/2005, Workplace exposure limits 2005, with amendments.
The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).

15.2. Chemical safety assessment

Chemical safety assessment performed No

SECTION 16: Other information

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

EUH 071 Corrosive to the respiratory tract.
H226 Flammable liquid and vapour.
H272 May 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.
H400 Very toxic to aquatic life.
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: 2-5%:
H314 Causes severe skin burns and eye damage.

Information added, deleted or revised

Relevant changes compared to the previous version of the safety data sheet are indicated with vertical lines in the left margin.

Version

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Prepared by

ALM