NOVADAN®

SAFETY DATA SHEET
FOAM 32 T

NOVADAN®

SDS according to Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex II-EU

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

Date issued	27.02.2012
Revision date	15.01.2015

1.1. Product identifier

Product name	FOAM 32 T
Article no.	12774, 12775, 12776, 12777, 12778, 57770

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

Product group	Alkaline foam cleaning agent.
Use of the substance/preparation	Strong alkaline foam detergent.
Relevant identified uses	SU1 Agriculture, forestry, fishery 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) PROC10 Roller application or brushing 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

Company name	Novadan ApS
Postal address	Platinvej 21
Postcode	DK-6000
City	Kolding
Country	Danmark
Tel	+ 45 76 34 84 00
Fax	+ 45 75 50 43 70
E-mail	sds@novadan.dk
Website	http://www.novadan.dk

1.4. Emergency telephone number

Emergency telephone	Link to national poison centers:http://echa.europa.eu/help/nationalhelp_contact_en.asp:

SECTION 2: Hazards identification

2.1. Classification of substance or mixture

Classification according to 67/548/EEC or 1999/45/EC	C; R35
Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]	Skin Corr 1A;H314;

Substance / mixture hazardous properties	For further information, please refer to section 11.

2.2. Label elements

Hazard Pictograms (CLP)

Composition on the label	Potassium hydroxide, Sodium hydroxide
Signal word	Danger
Hazard statements	H314 Causes severe skin burns and eye damage.
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.

2.3. Other hazards

Health effect	Corrosive to skin and eyes. May cause permanent damage to the eyes, especially if the product is not washed away IMMEDIATELY. 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.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
Caustic potash	CAS no.: 1310-58-3 EC no.: 215-181-3 Index no.: 019-002-00-8 Registration number: 01-2119487136-33-xxxx Synonyms: Potassium hydroxide	C; R35 Xn; R22 Acute tox. 4;H302; Skin Corr 1A;H314;	5 - 15 %
Sodium hydroxide	CAS no.: 1310-73-2 EC no.: 215-185-5 Index no.: 011-002-00-6 Registration number: 01-2119457892-27-XXXX Synonyms: Sodium hydroxide	C; R35 Skin Corr. 1A; H314	1 - 5 %
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	CAS no.: 308062-28-4 EC no.: 931-292-6 Registration number: 01-2119490061-47-xxxx	Xi; R38,R41 N; R50 Xn; R22 Acute tox. 4;H302; Skin Irrit. 2;H315; Eye Dam. 1;H318; Aquatic Acute 1;H400; Aquatic Chronic 2;H411; M-factor:1	1 - 5 %
Substance comments	<5%: nonionic surfactant , phosphonate . The Full Text for all R-Phrases and Hazard Statements are 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	As described in section 2.2 and 2.3.
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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.

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.

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. In case of inadequate ventilation, use respiratory protection. For personal protection, see section 8.

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.

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.

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 spilling, skin and eye contact. Do not mix with acidic products.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Keep separate from food, feedstuffs, fertilisers and other sensitive material. Store protected from acids.

Conditions for safe storage

Storage Temperature	Value: -5-35 °C
Storage Stabilit	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

Occupational Exposure limit values

Substance	Identification	Value	TWA Year
Caustic potash	CAS no.: 1310-58-3 EC no.: 215-181-3 Index no.: 019-002-00-8 Registration number: 01-2119487136-33-xxxx Synonyms: Potassium hydroxide	15 min.: 2 mg/m3	2011
Sodium hydroxide	CAS no.: 1310-73-2 EC no.: 215-185-5 Index no.: 011-002-00-6 Registration number: 01-2119457892-27-XXXX Synonyms: Sodium hydroxide	15 min.: 2 mg/m3	2011
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	CAS no.: 308062-28-4 EC no.: 931-292-6 Registration number: 01-2119490061-47-xxxx		

DNEL / PNEC from substances

Substance	Sodium hydroxide
DNEL	Group: Consumer Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Local effect Value: 1 mg/m³ Remarks: ECHA
DNEL	Group: Worker Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Local effect Value: 1 mg/m³ Remarks: ECHA
Substance	Amines, C12-14 (even numbered)- alkyldimethyl, N-oxides
DNEL	Group: Worker

	Exposure route: Dermal Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 11 mg/kg bw/d
DNEL	Group: Worker Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Local effect Value: 15,5 mg/m3 8h
DNEL	Group: Worker Exposure route: Dermal Exposure frequency: Long term (repeated) Type of effect: Local effect Value: 0,27%
DNEL	Group: Consumer Exposure route: Dermal Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 5,5 mg/kg bw/d
DNEL	Group: Consumer Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 3,8 mg/m3
DNEL	Group: Consumer Exposure route: Oral Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 0,44 mg/kg bw/d
PNEC	Exposure route: Freshwater Value: 0,0335 mg/l
PNEC	Exposure route: Saltwater Value: 0,00335 mg/l
PNEC	Value: 0,0335 mg/l Remarks: (intermittent release)
PNEC	Exposure route: Freshwater sediments Value: 5,24 mg/kg
PNEC	Exposure route: Saltwater sediments Value: 0,524 mg/kg
PNEC	Exposure route: Soil Value: 1,02 mg/kg
PNEC	Exposure route: Sewage treatment plant STP Value: 24 mg/kg

8.2. Exposure controls

Recommended monitoring procedures	Not known.
Limitation of exposure on workplace	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.

Safety signs

Respiratory protection

Respiratory protection	Use respiratory equipment with particle filter, type P2.

Hand protection

Hand protection	Use protective gloves made of: Butyl rubber. Neoprene. Nitrile.
Breakthrough time	Breakthrough time for nitrile rubber, neoprene and butyl rubber is approx. 3 hours. The recommendation is a qualified estimate based on knowledge of the components. Elastic gloves stretch when used as glove thickness and thus the breakthrough time reduced. The EN 374-3 standard test is performed at 23°C, but the practical temperature of the glove is approx. 35°C. The breakthrough time of the different glove guides, is therefor reduced by a factor 3.

Eye / face protection

Eye protection	Use eye protection. (EN 166).

Skin protection

Skin protection (except hands)	Wear apron or protective clothing in case of contact. Wear rubber footwear.

Thermal hazards

Thermal hazards	None specific.

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	Fluid.
Colour	Clear Brownish.
Odour	No characteristic odour.
Comments, Odour limit	Not relevant.
pH (as supplied)	Value: > 13,0
pH (aqueous solution)	Value: ~ 12,5
Comments, pH (aqueous solution)	2,5%
Comments, Melting point / melting range	Not relevant.
Comments, Boiling point / boiling range	Not relevant.
Comments, Flash point	Not relevant.
Comments, Evaporation rate	Not relevant.
Flammability (solid, gas)	Not relevant.
Comments, Explosion limit	Not relevant.
Comments, Vapour pressure	Not relevant.
Comments, Vapour density	Not relevant.
Bulk density	Value: ~ 1,10 kg/l
Solubility description	Completely soluble in water.
Comments, Partition coefficient: n-octanol / water	Not relevant.
Comments, Spontaneous combustability	Not relevant.
Comments, Decomposition temperature	Not relevant.
Viscosity	Value: < 50 mPas
Explosive properties	Not explosive.

Oxidising properties	Does not meet the criteria for oxidising.

9.2. Other information

Other physical and chemical properties

Comments	No data recorded.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Reacts violently with strong acids. Reacts strongly with water. Do not add water directly to the product. It may cause a violent reaction. Risk of bumping (splashes).

10.4. Conditions to avoid

Conditions to avoid	Heating. Extremes of temperatures. Avoid contact with acids.

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.

10.6. Hazardous decomposition products

Hazardous decomposition products	In case of fire, toxic gases (CO, CO2, NOx) may be formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological Information:

Other toxicological data	Toxicological tests on the product has not been performed.

Toxicological data for substances

Substance	Caustic potash
LD50 oral	Value: 333 mg/kg Animal test species: Rat Comments: Supplier MSDS
Acute toxicity	Skin: Highly Corrosive. Eye: Highly Corrosive. Ingestion: Highly Corrosive.
Respiratory or skin sensitisation	Result: Not Sensitising.
Substance	Sodium hydroxide
LD50 oral	Value: 325 mg/kg bw Animal test species: rabbit Duration: single dose Test reference: - Comments: EU/RAR
LDLo oral	Value: 500 mg/kg bw Animal test species: rat Duration: single dose

	Test reference: - Comments: EU/RAR
Other toxicological information for the substance	Acute Toxicity (Dermal LD50): Data lacking. OECD/SIDS 2002. Acute Toxicity (Inhalation LC50): Data lacking. OECD/SIDS 2002.
Acute toxicity	Ingestion: Strongly corrosive. Even small amounts may cause very severe internal damage and may be fatal. Human/OECD/SIDS 2002.
Skin corrosion / irritation	Species: Yorkshire weanling pigs. Result: Corrosive to skin. (8% NaOH-solution). Duration: 15 min. Method of testing: No information required. EU/RAR.
Serious eye damage / irritation	Species: Rabbit. Result: Corrosive to eyes. (10% NaOH-solution). Duration: 24h. Method of testing: OECD 405 . ECHA.
Substance	Amines, C12-14 (even numbered)- alkyldimethyl, N-oxides
LD50 oral	Value: 1064 mg/kg Animal test species: Rat
Skin corrosion / irritation	Species: Not known. Result: Skin irritation. Method of testing: Not known.
Serious eye damage / irritation	Species: Not known. Result: Irreversible eye damage. Method of testing: Not known.
Respiratory or skin sensitisation	Species: Not known. Result: Not Sensitising. Method of testing: Not known.

Other information regarding health hazards

General	This substance is corrosive.

Potential acute effects

Inhalation	Aerosols may be corrosive. Inhalation may cause: Serious damage to the lining of nose, throat and lungs.
Skin contact	Strongly corrosive. May cause deep tissue damage.
Eye contact	Strongly corrosive. Causes severe burns and serious eye damage. Immediate first aid is imperative. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.
Ingestion	Strongly corrosive. Even small amounts may be fatal. Symptoms are severe burning pains in mouth, throat and stomach. May cause burns in mucous membranes, throat, oesophagus and stomach.

Symptoms of Exposure

Symptoms of overexposure	No specific symptoms noted.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	Large amounts of the product may affect the acidity (pH-factor) in water with possible risk of harmful effects to aquatic organisms.
Aquatic, comments	No data available for the product.

Toxicological data for substances

Substance	Caustic potash
Acute aquatic, fish	Value: 50-165 mg/l Method of testing: LC50 Test reference: Supplier MSDS
Acute aquatic, Daphnia	Value: 30-1000 mg/l Method of testing: EC50 Species: Daphnia Test reference: Supplier MSDS
Ecotoxicity, other effects	The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.
Mobility, description	Mobility, description: The product is miscible with water. May spread in water systems.
Persistence and degradability	This product mainly consists of inorganic compounds which are not

	biodegradable. The remaining compounds of the product are expected to be easily biodegradable.
Bioaccumulation	Bioaccumulation: Is not expected to be bioaccumulable.
Result of PBT assessment for the substance	Not Classified as PBT/vPvB by current EU criteria.
Substance	Amines, C12-14 (even numbered)- alkyldimethyl, N-oxides
Acute aquatic, fish	Value: 2,67 mg/l Method of testing: LC50
Acute aquatic, algae	Value: 0,143 mg/l Method of testing: LC50
Acute aquatic, Daphnia	Value: 3,1 mg/l Method of testing: LC50
Mobility, description	Mobility, description: The product is miscible with water. May spread in water systems.
Persistence and degradability	The product is easily biodegradable.
Bioaccumulation	Bioaccumulation: Is not expected to be bioaccumulable.
Result of PBT assessment for the substance	Not Classified as PBT/vPvB by current EU criteria.

12.2. Persistence and degradability

Persistence and degradability	The product is easily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential	The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility	The product is water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Environmental details, summation	For this product no classification is required for environmental hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	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. -
Product classified as hazardous waste	Yes
Packaging classified as hazardous waste	Yes
EWC waste code	EWC: 0706 wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
Other Information	When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste code applies to product remnants in pure form.

SECTION 14: Transport information

14.1. UN number

ADR	1719
RID	1719
IMDG	1719
ICAO/IATA	1719

14.2. UN proper shipping name

ADR	CAUSTIC ALKALI LIQUID, N.O.S. (Sodiumhydroxide, Potassiumhydroxide)
RID	CAUSTIC ALKALI LIQUID, N.O.S. (Sodiumhydroxide, Potassiumhydroxide)
IMDG	CAUSTIC ALKALI LIQUID, N.O.S. (Sodiumhydroxide, Potassiumhydroxide)
ICAO/IATA	CAUSTIC ALKALI LIQUID, N.O.S. (Sodiumhydroxide, Potassiumhydroxide)

14.3. Transport hazard class(es)

ADR	8
Hazard no.	80
RID	8
IMDG	8
ICAO/IATA	8

14.4. Packing group

ADR	II
RID	II
IMDG	II
ICAO/IATA	II

14.5. Environmental hazards

IMDG Marine pollutant	No

14.6. Special precautions for user

EmS	F-A, S-B
Special safety precautions for user	Not relevant.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Additional information.

Additional information.	Not relevant.

SECTION 15: Regulatory information

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

EEC-directive	Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents. Dangerous Preparations Directive 1999/45/EC. Dangerous Substance Directive 67/548/EEC.
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). 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. Miljøministeriets bekendtgørelse nr. 1309 af 18. December 2012 om affald.

15.2. Chemical safety assessment

Chemical safety assessment performed	No

SECTION 16: Other information

Hazard symbol

R-phrases	R35 Causes severe burns.
S-phrases	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Supplier's notes	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.
Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]	Skin Corr 1A; H314;
List of relevant R-phrases (under headings 2 and 3).	R38 Irritating to skin. R50 Very toxic to aquatic organisms. R35 Causes severe burns. R22 Harmful if swallowed. R41 Risk of serious damage to eyes.
List of relevant H-phrases (Section 2 and 3).	H318 Causes Serious eye damage. H302 Harmful if swallowed. H400 Very toxic to aquatic life. H315 Causes skin irritation. H314 Causes severe skin burns and eye damage. H411 Toxic to aquatic life with long lasting effects.
Training advice	Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.
Information which has been added, deleted or revised	Change to Sections: 1, 2, 3, 8, 9, 11, 12, 13, 16 Labeling changed to CLP
Version	2
Responsible for safety data sheet	Novadan ApS
Prepared by	ALM