

NOVADAN®**SAFETY DATA SHEET**
Viri Wash**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 30.07.2012

Revision date 21.11.2016

1.1. Product identifier

Product name Viri Wash

Article no. 12679, 12680, 12868, 56727

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

Use of the substance/preparation Udder hygiene.

Relevant identified uses

- SU1 Agriculture, forestry, fishery
- 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 UK: NHS:111

EI: National Poisons Information Centre, 24/7:01 809 2166

SECTION 2: Hazards identification**2.1. Classification of substance or mixture**

Classification according to EUH 208;

Regulation (EC) No 1272/2008

[CLP/GHS]

Substance / mixture hazardous properties

For further information, please refer to section 11.

2.2. Label elements

Hazard statements

EUH 208 Contains 1,2-Benzisothiazol-3(2H)-one May produce an allergic reaction.

2.3. Other hazards

Environmental effects

This product does not contain any PBT or vPvB substances.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
Sodium lauryl ether sulfate	CAS no.: 68891-38-3 EC no.: 500-234-8 Registration number: 01-2119488639-16-xxxx	Xi; R36/38 Eye Dam. 1;H318; Skin Irrit. 2;H315; Aquatic Chronic 3;H412; Additional information on component classification:SCL: ≥5% Eye Irr. 2 ≥10% Eye Dam. 1	1 - 5 %
Sulfonic acids, -alkane, sodium salts	CAS no.: 68439-57-6 EC no.: 270-407-8 Registration number: 01-2119513401-57-xxxx	Xi; R38,R41 Eye Dam. 1;H318; Skin Irrit. 2;H315; Additional information on component classification:SCL: 5-38% Eye Irr.2; >38% Eye Dam.1	1 - 5 %
Amide polyglycol ether	EC no.: 932-164-2 Registration number: 01-2119565130-50-xxxx	Xi; R38 Skin Irrit. 2;H315;	1 - 5 %
1,2-Benzisothiazol-3(2H)-one	CAS no.: 2634-33-5 EC no.: 220-120-9 Index no.: 613-088-00-6	Xn,N; R22 Xi; R38,R41 R43 N; R50 Acute tox. 4;H302; Skin Irrit. 2;H315; Eye Dam. 1;H318; Skin Sens. 1;H317; Aquatic Acute 1;H400; Additional information on component classification:SCL: H317: C ≥ 0,05%	0,005 - 0,05 %
Substance comments	<5%: nonionic surfactant , anionic surfactant <1% : preservative: benzisothiazolinone . 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	Fresh air. Get medical attention if any discomfort continues.
Skin contact	Rinse with water. Contact physician if discomfort continues.
Eye contact	Immediately rinse with water for several minutes. Make sure to remove any contact lenses from the eyes before rinsing. Contact physician if irritation

	persists.
Ingestion	Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Get medical attention if any discomfort continues.

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	No known long term effects.

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

Other Information	If unconscious: Call an ambulance/physician immediately. 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.
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5.3. Advice for firefighters

Personal protective equipment	Use personal protective equipment as required.
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	Avoid contact with skin and eyes. Risk of contact: Wear protective gloves and goggles/face shield.
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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	No specific usage precautions noted.
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7.2. Conditions for safe storage, including any incompatibilities

Storage	Keep in original container. Keep separate from food, feedstuffs, fertilisers and other sensitive material. Store above freezing.
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Conditions for safe storage

Storage Temperature	Value: 0-35 °C.
Storage Stability	Durability: 24 months.

7.3. Specific end use(s)

Specific use(s)	The identified uses for this product are detailed in Section 1.2.
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure limit values

Substance	Identification	Value	TWA Year
Sodium lauryl ether sulfate	CAS no.: 68891-38-3 EC no.: 500-234-8 Registration number: 01-2119488639-16-xxxx		
Sulfonic acids, -alkane, sodium salts	CAS no.: 68439-57-6 EC no.: 270-407-8 Registration number: 01-2119513401-57-xxxx		
Amide polyglycol ether	EC no.: 932-164-2 Registration number: 01-2119565130-50-xxxx		
1,2-Benzisothiazol-3(2H)-one	CAS no.: 2634-33-5 EC no.: 220-120-9 Index no.: 613-088-00-6		

DNEL / PNEC from substances

Substance	Sodium lauryl ether sulfate
DNEL	Group: Consumer Exposure route: Oral Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 15 mg/kg
DNEL	Group: Consumer Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 52 mg/m ³
DNEL	Group: Consumer Exposure route: Dermal Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 1650 mg/kg
DNEL	Group: Worker Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 175 mg/m ³
DNEL	Group: Worker Exposure route: Dermal Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 2750 mg/kg
DNEL	Value: 0,071 mg/l Remarks: Intermittent release
PNEC	Exposure route: Freshwater Value: 0,24 mg/l
PNEC	Exposure route: Freshwater sediments Value: 5,45 mg/l
PNEC	Exposure route: Sewage treatment plant STP Value: 10000 mg/l
PNEC	Exposure route: Saltwater Value: 0,024 mg/l
PNEC	Exposure route: Saltwater sediments Value: 0,545 mg/l

PNEC	Exposure route: Soil Value: 0,946 mg/kg
Substance	Sulfonic acids, -alkane, sodium salts
DNEL	Group: Worker Exposure route: Dermal Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 2,2 g/kg bw/d
DNEL	Group: Worker Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 152,2 mg/m ³
DNEL	Group: Consumer Exposure route: Dermal Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 1,3 g/kg bw/d
DNEL	Group: Consumer Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 45 mg/m ³
DNEL	Group: Consumer Exposure route: Oral Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 13,0 mg/kg bw/d
PNEC	Exposure route: Sewage treatment plant STP Value: 4 mg/l
PNEC	Exposure route: Soil Value: 0,0061 mg/kg
PNEC	Exposure route: Saltwater sediments Value: 0,2 mg/kg
PNEC	Exposure route: Freshwater sediments Value: 2,0 mg/kg
PNEC	Value: 0,042 mg/l Remarks: Intermittent release
PNEC	Exposure route: Saltwater Value: 0,0042 mg/l
PNEC	Exposure route: Freshwater Value: 0,042 mg/l

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.
Respiratory protection	
Respiratory protection	Under normal conditions of use respiration protection should not be required.
Hand protection	
Hand protection	No specific hand protection noted, but gloves may still be advisable.
Eye / face protection	
Eye protection	Eye protection is not required under normal conditions.

Skin protection

Skin protection (except hands)	No special precautions.
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Thermal hazards

Thermal hazards	None specific.
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Appropriate environmental exposure control

Environmental exposure controls	See section 6.
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SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	Fluid.
Colour	Yellowish.
Odour	No data recorded.
Comments, Odour limit	No data recorded.
pH (as supplied)	Value: ~ 5,5
Comments, pH (aqueous solution)	No data recorded.
Comments, Melting point / melting range	No data recorded.
Comments, Boiling point / boiling range	No data recorded.
Comments, Flash point	Not relevant.
Comments, Evaporation rate	No data recorded.
Comments, Explosion limit	Not relevant.
Comments, Vapour pressure	No data recorded.
Comments, Vapour density	No data recorded.
Bulk density	Value: ~ 1,05 kg/l.
Solubility description	Completely soluble in water.
Comments, Partition coefficient: n-octanol / water	No data recorded.
Comments, Spontaneous combustability	Not relevant.
Comments, Decomposition temperature	Not relevant.
Viscosity	Value: < 50 mPa s
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.
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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	No information required.
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10.4. Conditions to avoid

Conditions to avoid	Avoid frost.
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10.5. Incompatible materials

Materials to avoid	No information required.
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10.6. Hazardous decomposition products

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

Other information

Other Information No data recorded.

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	Sodium lauryl ether sulfate
LD50 oral	Value: > 5000 mg/kg Comments: OECD 401
LD50 dermal	Value: > 5000 mg/kg
Substance	Sulfonic acids, -alkane, sodium salts
LD50 oral	Value: > 2000 mg/kg Animal test species: Rat Comments: OECD 401
Substance	Amide polyglycol ether
LD50 oral	Value: > 2000 mg/kg Animal test species: Rat
Substance	1,2-Benzisothiazol-3(2H)-one
LD50 oral	Value: 1150 mg/kg Animal test species: Mouse
LD50 oral	Value: 597 mg/kg Animal test species: Rat
LD50 dermal	Value: > 2000 mg/kg
Respiratory or skin sensitisation	Species: Rabbit. Method of testing: Not entered. Result: Sensitising.

Other information regarding health hazards

General No information about adverse effects due to exposure.

Acute toxicity, Mixture estimate

Assessment of acute toxicity classification No evidence for acute toxicity.

Potential acute effects

Inhalation	No known chronic or acute health risks.
Skin contact	Skin irritation is not anticipated when used normally.
Eye contact	Direct contact may irritate.
Ingestion	May cause discomfort if swallowed.
Aspiration hazard	No evidence for aspiration hazard.

Delayed effects / repeated exposure

Sensitisation	Contains 1,2-Benzisothiazol-3(2H)-one. May produce an allergic reaction.
STOT-single exposure	No evidence for STOT-single exposure.
STOT-repeated exposure	No evidence for STOT-repeated exposure.

Carcinogenic, Mutagenic or Reprotoxic

Carcinogenicity	No evidence for carcinogenicity.
Mutagenicity	No evidence for germ cell mutagenicity.
Reproductive toxicity	No evidence for reproductive toxicity.

Symptoms of Exposure

Symptoms of overexposure No specific symptoms noted.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	Not classified as dangerous to the environment.
Aquatic, comments	No data available for the product.

Toxicological data for substances

Substance	Sodium lauryl ether sulfate
Acute aquatic, fish	Value: 10-100 mg/l Method of testing: LC50 Species: Leuciscus idus Test reference: DIN EN ISO 7346-2
Acute aquatic, algae	Value: > 100 mg/l Method of testing: EC50 Species: Scenedesmus subspicatus Test reference: OECD Guideline 201
Acute aquatic, Daphnia	Value: 10-100 mg/l Method of testing: EC50 Species: Daphnia magna Test reference: OECD Guideline 202, del 1
Other ecotoxicological substance information regarding fish	NOEC > 1 - 10 mg/l, Leuciscus idus
Mobility, description	Mobility, description: The product is water soluble and 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.
Substance	Sulfonic acids, -alkane, sodium salts
Acute aquatic, fish	Value: 1-10 mg/l Method of testing: LC50, OECD 203 Species: Brachydanio rerio Duration: 96h
Acute aquatic, algae	Value: 5,2 mg/l Method of testing: OECD 201 Species: Skeletonema costatum Duration: 72h
Acute aquatic, Daphnia	Value: 4,53 mg/l Method of testing: OECD 202 Species: Ceriodaphnia Spec. Duration: 48h
Aquatic, comments	Bacteria: EC50: 230 mg/l, OECD 209
Mobility, description	Mobility, description: The product is water soluble and may spread in water systems.
Persistence and degradability	The product is easily biodegradable.
Biodegradability	Value: 98% Test period: 28d Method of testing: OECD 301 B
Chemical oxygen demand (COD)	Value: 790 mg/g
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	Amide polyglycol ether
Acute aquatic, fish	Value: 13 mg/l Method of testing: LC50

	Species: Fish Duration: 96h
Acute aquatic, algae	Value: 22 mg/l Method of testing: EC50 Species: Algae Duration: 72h
Acute aquatic, Daphnia	Value: 7 mg/l Method of testing: EC50 Species: Daphnie Duration: 48h
Persistence and degradability	Easy biodegradable
Substance	1,2-Benzisothiazol-3(2H)-one
Acute aquatic, fish	Value: 0,74 mg/l Method of testing: LC50 Duration: 96h
Acute aquatic, Daphnia	Value: 2,44 mg/l Method of testing: EC50 Species: Daphnia magna Duration: 48h
Distribution coefficient	Value: 0,4 Method of testing: Fordeling log Pow (BIT) Comments: Forventes ikke at bioakkumulere.

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	Dispose of waste and residues in accordance with local authority requirements. -
Product classified as hazardous waste	No
Packaging classified as hazardous waste	No
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

Comments The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.2. UN proper shipping name

Comments	Not relevant.
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14.3. Transport hazard class(es)

Comments	Not relevant.
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14.4. Packing group

Comments	Not relevant.
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14.5. Environmental hazards

Comments	Not relevant.
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14.6. Special precautions for user

Special safety precautions for user	Not relevant.
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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Additional information.

Additional information.	Not relevant.
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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.
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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. 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.
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15.2. Chemical safety assessment

Chemical safety assessment performed	No
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SECTION 16: Other information

Classification according to	; EUH 208;
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Regulation (EC) No 1272/2008 [CLP/GHS]	
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List of relevant R-phrases (under headings 2 and 3).	R43 May cause sensitization by skin contact. R50 Very toxic to aquatic organisms. R36/38 Irritating to eyes and skin. R41 Risk of serious damage to eyes. R38 Irritating to skin. R22 Harmful if swallowed.
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List of relevant H-phrases (Section 2 and 3).	H318 Causes Serious eye damage. H302 Harmful if swallowed. H412 Harmful to aquatic life with long lasting effects.
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	H400 Very toxic to aquatic life. H315 Causes skin irritation. H317 May cause an allergic skin reaction. EUH 208 Contains May produce an allergic reaction.
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.
Information which has been added, deleted or revised	Re-formulation. Change in classification. Change to Sections: 1, 2, 3, 4, 8, 11, 12, 16
Version	3
Responsible for safety data sheet	Novadan ApS
Prepared by	MP