

NOVADAN®

SAFETY DATA SHEET

Danalub 14

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 10.12.2013

Revision date 01.06.2015

1.1. Product identifier

Product name Danalub 14

Article no. 12794, 12828

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

Product group Chain lubricant for conveyors.

Use of the substance/preparation Chain lubricant for conveyors.

Relevant identified uses SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU4 Manufacture of food products

PC24 Lubricants, greases, release products

PROC17 Lubrication at high energy conditions and in partly open process

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 Xn; R48/22
 67/548/EEC or 1999/45/EC

Classification according to STOT RE2;H373;
 Regulation (EC) No 1272/2008 Aquatic Chronic 3;H412;
 [CLP/GHS] Skin Irrit. 2;H315;
 Eye Irrit. 2;H319;

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

properties

2.2. Label elements**Hazard Pictograms (CLP)**

Composition on the label

Signal word

Hazard statements

Precautionary statements

N-Oleyl-1,3-diaminopropane

Warning

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H373 May cause damage to organs through prolonged or repeated exposure

H412 Harmful to aquatic life with long lasting effects.

P260 Do not breathe spray/mist.

P314 Get medical advice/attention if you feel unwell.

P280 Wear eye protection/protective gloves.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P273 Avoid release to the environment.

2.3. Other hazards

Description of hazard

Health effect

Environmental effects

Harmful: possible risk of irreversible effects if swallowed.

See section 11 for additional information on health hazards.

This product does not contain any PBT or vPvB substances.

Contains a substance which causes risk of hazardous effects to the environment.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

Substance	Identification	Classification	Contents
N-Oleyl-1,3-diaminopropane	CAS no.: 7173-62-8 EC no.: 230-528-9 Registration number: 01-2119487002-46-xxxx	T,N; R22,R34,R48/25, R50 Acute tox. 4;H302; Skin Corr 1B;H314; STOT RE1;H372; Aquatic Acute 1;H400; Aquatic Chronic 1;H410;	1 < 3 %
Acetic acid ...%	CAS no.: 64-19-7 EC no.: 200-580-7 Index no.: 607-002-00-6	M-factor:10 Acute Flam. Liq. 3; H226 Skin Corr. 1A; H314 Note : B	< 1 %
Tallowdipropylene triamine	CAS no.: 85632-63-9 EC no.: 288-048-0 Registration number: 01-2119487012-45-0000	C,Xn,N; R22,R35,R48/22, R50 Acute tox. 4; H302; Skin Corr 1B; H314; STOT RE2; H373; Aquatic Acute 1; H400;	< 1 %
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	CAS no.: 2372-82-9 EC no.: 219-145-8	M-factor:1 C,N; R22,R35,R48/22, R50 Acute tox. 3;H301;	< 1 %

		Skin Corr 1A;H314; STOT RE2;H373; Aquatic Acute 1;H400; Aquatic Chronic 1;H410; M-factor:10 Acute	
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Substance comments

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<5%: cationic surfactant , anionic surfactant .

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	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	Immediately rinse mouth and drink plenty of water. Call an ambulance. Bring along these instructions. 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.
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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.
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 hazardous to your health. Use protective gloves, goggles and suitable protective clothing. In case of inadequate ventilation, use respiratory protection. For personal protection, see section 8. In case of spills, beware of slippery floors and surfaces.
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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.

6.3. Methods and material for containment and cleaning up

Cleaning method Smaller quantities of residue may be collected by an absorbent. 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. Use work methods which minimize spreading of vapours, dust, smoke, aerosols, splashes etc. to the extent technically possible.

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.

Conditions for safe storage

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

Occupational Exposure limit values

Substance	Identification	Value	TWA Year
N-Oleyl-1,3-diaminopropane	CAS no.: 7173-62-8 EC no.: 230-528-9 Registration number: 01-2119487002-46-xxxx		
Acetic acid ...%	CAS no.: 64-19-7 EC no.: 200-580-7 Index no.: 607-002-00-6		
Tallowdipropylene triamine	CAS no.: 85632-63-9 EC no.: 288-048-0 Registration number: 01-2119487012-45-0000		
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	CAS no.: 2372-82-9 EC no.: 219-145-8		

DNEL / PNEC

Summary of risk management measures, human Data lacking.

Summary of risk management measures, environment Data lacking.

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 Under normal conditions of use respiration protection should not be required.

Hand protection

Hand protection Protective gloves are recommended.

Eye / face protection

Eye protection Eye protection is not required under normal conditions.

Skin protection

Skin protection (except hands) No recommendation given.

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	Fluid.
Colour	Yellow.
Odour	Amine.
pH (as supplied)	Value: ~ 5,5
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: ~ 1,00
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.

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 No information required.

10.4. Conditions to avoid

Conditions to avoid Avoid frost.

10.5. Incompatible materials

Materials to avoid No information required.

10.6. Hazardous decomposition products

Hazardous decomposition products In case of fire, toxic gases (CO, CO₂, NO_x) 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 N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

LD50 oral Value: 261 mg/kg

Animal test species: Rat

Comments: OECD TG 401

LD50 dermal Value: > 600 mg/kg

Animal test species: Rat

Test reference: OECD TG 402

Comments: Maximum tested concentration, no deaths.

Other toxicological information for the substance Skin corrosion/irritation - animal Data: Rabbit - OECD TG 404
Not Sensitising. Buehler test: Guinea Pig - OECD TG 406

Other information regarding health hazards

General Contact with this chemical can be hazardous.

Potential acute effects

Inhalation In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

Skin contact Liquid may irritate the skin.

Eye contact Direct contact may irritate.

Ingestion Harmful: possible risk of irreversible effects if swallowed.

Symptoms of Exposure

Symptoms of overexposure No specific symptoms noted.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity The product contains a substance which is harmful to aquatic organisms.
Contains a substance (Aquatic Acute 1; H400 or Aquatic Chronic 1; H410) that falls within the scope of the multiplication factor rule.

Aquatic, comments No data available for the product.

Toxicological data for substances

Substance	N-Oleyl-1,3-diaminopropane
Acute aquatic, fish	Value: 0,1-1 mg/l. Method of testing: LC50 - OECD TG 203 Species: Brachydanio rerio Duration: 96h
Acute aquatic, algae	Value: > 0,1-1 mg/l. Method of testing: EC50 - OECD TG 201 Species: Desmodesmus subspicatus Duration: 72h
Acute aquatic, Daphnia	Value: > 0,1-1 mg/l. Method of testing: EC50 - OECD TG 202 Species: Daphnia magna Duration: 48 h
Mobility, description	Mobility, description: Not considered mobile.
Biodegradability	Value: > 60 Method of testing: OECD 301D Comments: Readily biodegradable.
Biological oxygen demand (BOD)	Comments: No data recorded.
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	Tallowdipropylene triamine
Acute aquatic, fish	Value: > 0,1-1 mg/l Method of testing: LC50 - OECD TG 203 Species: Brachydanio rerio Duration: 96h
Acute aquatic, algae	Value: > 0,1-1 mg/l Method of testing: EC50 - OECD TG 201 Species: Desmodesmus subspicatus Duration: 72h
Acute aquatic, Daphnia	Value: > 0,1-1 mg/l Method of testing: EC50 - OECD TG 202 Species: Daphnia magna Duration: 48h
Ecotoxicity, other effects	Very toxic to aquatic organisms.
Mobility, description	Mobility, description: Not considered mobile.
Surface tension	Value: 36 mN/m
Biodegradability	Value: > 60 Test period: 28d Method of testing: OECD 301D Comments: Readily 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	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine
Acute aquatic, fish	Value: 0,68 mg/l Method of testing: LC50 - OECD TG 203 Species: Oncorhynchus mykiss Duration: 96h
Aquatic, comments	LC50, Lepomis Macrochirus, 0,45 mg/l, 96h, US-EPA EC50, Daphnia Magna, 0,073 mg/l, 48h, US-EPA NOEC, Daphnia Magna, 0,024 mg/l, 21d, OECD 211 ErC50, Pseudokirchneriella subcapitata, 0,054 mg/l, 96h, US-EPA ErC10, Desmodesmus subspicatus, 0,012 mg/l, 72h, OECD TG 201

Persistence and degradability	EC50, active sludge (bacteria), 18 mg/l, 3h, OECD 209
Biodegradability	OECD 303A: 96%, 12-15d
	Value: 79%
	Test period: 28d
	Method of testing: OECD 301D
	Comments: Readily biodegradable.

12.2. Persistence and degradability

Persistence and degradability	The product is easily biodegradable.
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12.3. Bioaccumulative potential

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

PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.
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12.6. Other adverse effects

Environmental details, summation	Product is harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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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

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

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

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

15.2. Chemical safety assessment

Chemical safety assessment performed	No
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SECTION 16: Other information

Hazard symbol



Harmful

R-phrases	R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
S-phrases	S46 If swallowed, seek medical advice immediately and show this container or label.
Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]	Skin Irrit. 2; H315; Eye Irrit. 2; H319; STOT RE2; H373; Aquatic Chronic 3; H412; R50 Very toxic to aquatic organisms.
List of relevant R-phrases (under headings 2 and 3).	R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed. R48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed. R34 Causes burns. R35 Causes severe burns. R22 Harmful if swallowed.

List of relevant H-phrases (Section 2 and 3).	H302 Harmful if swallowed. H412 Harmful to aquatic life with long lasting effects. H226 Flammable liquid and vapour. H373 May cause damage to organs through prolonged or repeated exposure H400 Very toxic to aquatic life. H315 Causes skin irritation. H314 Causes severe skin burns and eye damage. H301 Toxic if swallowed. H410 Very toxic to aquatic life with long lasting effects. H372 Causes damage to organs through prolonged or repeated exposure H319 Causes serious eye irritation.
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	All sections of the safety data sheet is updated. Labeling changed to CLP
Version	3
Responsible for safety data sheet	Novadan ApS
Prepared by	HBH