

NOVADAN®**SAFETY DATA SHEET****NOVADAN®****Ro Dan 300E****SECTION 1: Identification of the substance/mixture and of the company/undertaking**

Date issued 20.04.2012

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1.1. Product identifier

Product name Ro Dan 300E

Article no. 12698, 12817, 57761

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

Product group Enzymatic cleaner for membranes.

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)

PROC2 Use in closed, continuous process with occasional controlled exposure

ERC9A Wide dispersive indoor use of substances in closed 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 National Poisons Information Service:844 892 0111

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

Substance / mixture hazardous properties The product is not classified.
Not regarded as a health or environmental hazard under current legislation.

2.2. Label elements

S-phrases Contains subtilisin. May produce an allergic reaction.

2.3. Other hazards

Health effect May be slightly irritating to skin and eyes.
See section 11 for additional information on health 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
Betaines,C12-14-alkyldimethyl	CAS no.: 66455-29-6 EC no.: 266-368-1	Xi; R36/38 N; R50 Skin Irrit. 2;H315; Eye Irrit. 2;H319; Aquatic Acute 1;H400; M-factor:1	15 - 30 %
Column headings	CAS no. = Chemical Abstracts Service; EU (Einecs or Elincs number) = European inventory of Existing Commercial Chemical Substances; Ingredient name = Name as specified in the substance list (substances that are not included in the substance list must be translated, if possible). Contents given in; %, %wt/wt, %vol/wt, %vol/vol, mg/m3, ppb, ppm, weight%, vol%		
HH/HF/HE	T+ = Very toxic, T = Toxic, C = Corrosive, Xn = Harmful, Xi = Irritating, E = Explosive, O = Oxidizing, F+ = Extremely flammable, F = Very flammable, N = Environmental hazard		
Substance comments	15-30%: nonionic surfactant , <1% : Enzymes . 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	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.
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	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	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 Avoid contact with eyes.

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 No specific usage precautions noted.

7.2. Conditions for safe storage, including any incompatibilities

Storage Store in tightly closed original container.

Conditions for safe storage

Storage Temperature Value: -15-35 °C

Storage Stability Durability: 12 months.

7.3. Specific end use(s)

Specific use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other Information about threshold limit values No data recorded.

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.

Occupational exposure limits 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 Under normal conditions of use gloves are not normally required.

Eye / face protection

Eye protection Eye protection is not required under normal conditions.

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	Brownish.
pH (as supplied)	Value: ~ 7,0
pH (aqueous solution)	Value: ~ 6,5
Comments, pH (aqueous solution)	1%.
Bulk density	Value: ~ 1,05 kg/l.
Solubility description	Completely soluble in water.

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	No information required.
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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, CO ₂ , NO _x) may be formed.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological Information:

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

Substance	No data available for ingredient(s).
LD50 oral	Value: - -
	Animal test species: -
	Duration: -
	Comments: -

Other information regarding health hazards

General	No information about adverse effects due to exposure.
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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	Ingestion may cause irritation of the gastrointestinal tract, vomiting and diarrhoea.

Symptoms of Exposure

Symptoms of overexposure	No specific symptoms noted.
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SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	The product is not expected to be hazardous to the environment.
Aquatic, comments	No data recorded.

Toxicological data for substances

Substance	No data available for ingredient(s).
Aquatic, comments	-

12.2. Persistence and degradability

Chemical oxygen demand (COD)	Value: < 850
Comments COD	mg O ₂ / g.
Persistence and degradability	The product is expected to be biodegradable.

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	For this product no classification is required for environmental hazards.
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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).
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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.

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. The product is not classified. Safety data sheet available for professional user on request.
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).

15.2. Chemical safety assessment

Chemical safety assessment performed	No
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SECTION 16: Other information

List of relevant R-phrases (under headings 2 and 3).	R50 Very toxic to aquatic organisms. R36/38 Irritating to eyes and skin.
List of relevant H-phrases (Section 2 and 3).	H400 Very toxic to aquatic life. H319 Causes serious eye irritation. H315 Causes skin 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	Change to Sections: 2.2
Responsible for safety data sheet	Novadan ApS
Prepared by	MP