SAFETY DATA SHEET
Novaclean


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

Date issued 02.01.2012
Revision date 07.08.2014

1.1. Product identifier
Product name Novaclean
Article no. 12224, 12431, 41124, 41125, 41126, 41165, 59202, 59203

1.2. Relevant identified uses of the substance or mixture and uses advised against
Product group Alkaline heavy-duty cleaner.
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
SU20 Health services
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
PC35 Washing and cleaning products (including solvent based products)
PROC10 Roller application or brushing
ERC8A Wide dispersive indoor use of processing aids in open systems
ERC8D Wide dispersive outdoor 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 Novadán 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
Classification according to 67/548/EEC or 1999/45/EC C; R34
Substance / mixture hazardous properties For further information, please refer to section 11.
2.2. Label elements

Hazard symbol

![Hazard symbol](image)

R-phrases
- R34 Causes 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).

Composition on the label
- Disodium metasilicate, pentahydrate: 1 - 5%

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Identification</th>
<th>Classification</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disodium metasilicate, pentahydrate</td>
<td>CAS no.: 10213-79-3</td>
<td>C. Xi; R34, R37</td>
<td>1 - 5%</td>
</tr>
<tr>
<td></td>
<td>EC no.: 229-912-9</td>
<td>Skin Corr 1B; H314; Eye Dam. 1; H314; Met. Corr. 1; H290; STOT SE3; H335;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Registration number: 01-2119449811-37-xxxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alkyl imidazolinium carboxylate</td>
<td>CAS no.: 68604-71-7</td>
<td>Xi; R36 Eye Irrit. 2; H319;</td>
<td>1 - 5%</td>
</tr>
<tr>
<td></td>
<td>EC no.: 271-704-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Registration number: 02-2119666538-24-xxxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fatty alcohol ethoxylate</td>
<td>CAS no.: 26183-52-8</td>
<td>Xn; R22,R41 Eye Dam. 1; H318; Acute tox. 4; H302;</td>
<td>1 - 5%</td>
</tr>
<tr>
<td></td>
<td>Registration number: 02-2119549526-31-xxxx</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Substance comments
- 5-15%: nonionic surfactant
- <5%: phosphates
- 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. Smaller quantities of residue may be collected by an 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. Use work methods which minimise 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. Store protected from acids.

Conditions for safe storage

Storage Temperature Value: -10-35 °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

Occupational Exposure limit values

<table>
<thead>
<tr>
<th>Substance</th>
<th>Identification</th>
<th>Value</th>
<th>TWA Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disodium metasilicate, pentahydrate</td>
<td>CAS no.: 10213-79-3</td>
<td>6.22 mg/m^3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC no.: 229-912-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Registration number: 01-2119449811-37-xxxx</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| DNEL / PNEC from substances

Disodium metasilicate, pentahydrate

DNEL
Group: Worker
Exposure route: Inhalation
Exposure frequency: Long term (repeated)
Type of effect: Systemic effect
Value: 6.22 mg/m^3
Remarks: Supplier MSDS

DNEL
Group: Worker
Exposure route: Dermal
Exposure frequency: Long term (repeated)
Type of effect: Systemic effect
Value: 1.49 mg/kg bw/d
Remarks: Supplier MSDS

DNEL
Group: Consumer
Exposure route: Oral
Exposure frequency: Long term (repeated)
Type of effect: Systemic effect
Value: 0.74 mg/kg bw/d
Remarks: Supplier MSDS

DNEL
Group: Consumer
Exposure route: Inhalation
Exposure frequency: Long term (repeated)
Type of effect: Systemic effect
Value: 1.55 mg/m^3
Remarks: Supplier MSDS

DNEL
Group: Consumer
Exposure route: Dermal
Exposure frequency: Long term (repeated)
Type of effect: Systemic effect
Value: 0.74 mg/kg bw/d
Remarks: Supplier MSDS

PNEC
Exposure route: Water
Value: 7.5 mg/l
Remarks: Fresh water. Supplier MSDS

PNEC
Exposure route: Water

Revision date 07.08.2014
8.2. Exposure controls

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.

An eye wash bottle must be available at the work site.

Safety signs

Respiratory protection

In case of inadequate ventilation use suitable respirator. Use respiratory equipment with particle filter, type P2.

Hand protection


Eye / face protection

Use eye protection.

Skin protection

Wear apron or protective clothing in case of contact. Wear rubber footwear.

Thermal hazards

None specific.

Appropriate environmental exposure control

See section 6.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state
Fluid.

Colour
Yellowish.

Odour
No characteristic odour.

pH (as supplied)
Value: ~ 13,0

pH (aqueous solution)
Value: ~ 11,0

Comments, pH (aqueous solution)
2%

Bulk density
Value: ~ 1,05 kg/l

Solubility description
Completely soluble in water.

Viscosity
Value: < 50 mPas

9.2. Other information

Other physical and chemical properties

Comments
No data recorded.

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.
10.3. Possibility of hazardous reactions
Possibility of hazardous reactions Reacts violently with strong acids. 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

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50 oral</th>
<th>LD50 dermal</th>
<th>LC50 inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disodium metasilicate, pentahydrate</td>
<td>Value: &gt; 1152-1349 mg/kg</td>
<td>Value: &gt; 5000 mg/kg</td>
<td>Value: &gt; 2,06 g/m3</td>
</tr>
<tr>
<td>Comments: Supplier MSDS</td>
<td>Comments: Supplier MSDS</td>
<td>Comments: Supplier MSDS</td>
<td>Comments: Supplier MSDS</td>
</tr>
</tbody>
</table>

Skin corrosion / irritation Species: Not known. Result: Corrosive to skin.
Method of testing: Not known.

Serious eye damage / irritation Species: Not known. Result: Corrosive to eyes. Method of testing: Not known.
Respiratory or skin sensitisation Species: Not known. Result: Not Sensitising.
Method of testing: Not known.

Substance Alkyl imidazolinium carboxylat
Skin corrosion / irritation Species: Not known. Result: Non irritation to skin. Method of testing: Not known.
Respiratory or skin sensitisation Data lacking.
Substance Fatty alcohol ethoxylate
LD50 oral Value: 500-2000 mg/kg
Animal test species: Rat
LD50 dermal Value: > 4000 mg/kg
Animal test species: Rat

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 Corrosive. Prolonged contact causes serious 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 Corrosive. Even small amounts may cause serious damage. May cause burns in mucous membranes, throat, oesophagus and stomach.

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 recorded.

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

12.2. Persistence and degradability
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.

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 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.
RID CAUSTIC ALKALI LIQUID, N.O.S.
IMDG CAUSTIC ALKALI LIQUID, N.O.S.
ICAO/IATA CAUSTIC ALKALI LIQUID, N.O.S.

14.3. Transport hazard class(es)
14.4. Packing group
ADR III
RID III
IMDG III
ICAO/IATA III

14.5. Environmental hazards

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. Not relevant.

SECTION 15: Regulatory information

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

EEC-directive
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).
of 18 December 2006 concerning the Registration, Evaluation, Authorisation
and Restriction of Chemicals (REACH), establishing a European Chemicals
(EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as
895).

15.2. Chemical safety assessment
Chemical safety assessment No
performed

SECTION 16: Other information

List of relevant R-phrases (under
headings 2 and 3).
R37 Irritating to respiratory system.
R36 Irritating to eyes.
R34 Causes 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.
- H290 May be corrosive to metals.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H314 Causes severe skin burns and eye damage.

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: 1, 3, 16

Version

3

Responsible for safety data sheet

Novadan ApS

Prepared by

ANI

Revision date 07.08.2014