

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 05.02.2016

Version number 2

Revision: 05.02.2016

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

- **1.1 Product identifier**
- **Trade name: Novalin D**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
 - SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
 - SU21 Consumer uses: Private households / general public / consumers
 - SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Product category**
 - PC14 Metal surface treatment products, including galvanic and electroplating products
- **Application of the substance / the mixture** Metal surface treatment
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 - REMONDIS Medison GmbH
 - Bereich Staufen-Chemie
 - Friedrich-Glenck-Straße 4
 - 99087 Erfurt
 - GERMANY
 - +49 (0) 361/654593-0
 - +49 (0) 361/654593-20
 - msds@remondis-resolve.de
- **Further information obtainable from:** Abteilung Produktsicherheit
- **1.4 Emergency telephone number:** Mo.- Fr. 8:00 Uhr - 16:00 Uhr: +49 (0) 531/21031-42

2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Carc. 2 H351 Suspected of causing cancer.
 Repr. 2 H361d Suspected of damaging the unborn child.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.
 Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07



GHS08

- **Signal word** Warning
- **Hazard-determining components of labelling:**
thiourea
- **Hazard statements**
 - H319 Causes serious eye irritation.
 - H351 Suspected of causing cancer.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 05.02.2016

Version number 2

Revision: 05.02.2016

Trade name: Novalin D

(Contd. of page 1)

H361d Suspected of damaging the unborn child.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards**Results of PBT and vPvB assessment**• **PBT:** Not applicable.• **vPvB:** Not applicable.

3 Composition/information on ingredients

3.2 Mixtures• **Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 62-56-6 EINECS: 200-543-5 Index number: 612-082-00-0	thiourea ----- ☠ Carc. 2, H351; Repr. 2, H361d; ☠ Aquatic Chronic 2, H411; ☠ Acute Tox. 4, H302	5-<10%
CAS: 7664-93-9 EINECS: 231-639-5 Index number: 016-020-00-8	sulphuric acid ----- ☠ Skin Corr. 1A, H314	2,5-<5%
CAS: 69011-36-5	Isotridecanol, 6-9 EO ----- ☠ Eye Dam. 1, H318; ☠ Acute Tox. 4, H302	1-<3%

• **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

4.1 Description of first aid measures• **General information:** Immediately remove any clothing soiled by the product.• **After inhalation:** Supply fresh air; consult doctor in case of complaints.• **After skin contact:** Immediately wash with water and soap and rinse thoroughly.**After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

• **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.**4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media• **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.**5.2 Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Carbon monoxide (CO)

Carbondioxid (CO₂)**5.3 Advice for firefighters**• **Protective equipment:** Wear self-contained respiratory protective device.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 05.02.2016

Version number 2

Revision: 05.02.2016

Trade name: Novalin D

(Contd. of page 2)

- **Additional information**

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

7664-93-9 sulphuric acid

IOELV Long-term value: 0,05 mg/m ³

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 05.02.2016

Version number 2

Revision: 05.02.2016

Trade name: Novalin D

(Contd. of page 3)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

Value for the permeation: Level ≤ 6

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **For the permanent contact gloves made of the following materials are suitable:**

Nitrile rubber, NBR

- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Fluid
Colour:	Colourless
Odour:	Sulfurous
Odour threshold:	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (DIN 51751)

- **Flash point:** > 100 °C (DIN 51755 geschl. Träger)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 440 °C (ASTME E-659)

- **Decomposition temperature:** Not determined.

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

- **Vapour pressure at 20 °C:** 23 hPa

- **Density at 20 °C:** 1,04 g/cm³

- **Relative density** Not determined.

- **Vapour density** Not determined.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 05.02.2016

Version number 2

Revision: 05.02.2016

Trade name: Novalin D

(Contd. of page 4)

· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0,0 %
Water:	87,4 %
VOC (EC)	0,00 %
Solids content:	8,0 %
· 9.2 Other information	No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
Reacts with alkali (lyes).
Reacts with certain metals.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Avoid contact with other chemicals.
- **10.6 Hazardous decomposition products:** Hydrogen sulphide

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

62-56-6 thiourea

Oral	LD50	1750 mg/kg (rat)
Dermal	LD50	2800 mg/kg (rabbit)

7664-93-9 sulphuric acid

Oral	LD50	2140 mg/kg (rat)
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69011-36-5 Isotridecanol, 6-9 EO

Oral	LD50	>300-2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity**
Suspected of causing cancer.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 05.02.2016

Version number 2

Revision: 05.02.2016

Trade name: Novalin D

(Contd. of page 5)

- **Reproductive toxicity**
Suspected of damaging the unborn child.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

12 Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

62-56-6 thiourea

EC50/48h >500 mg/l (daphnia magna)

IC50/48h 360 mg/l (scenedesmus subspicatus)

69011-36-5 Isotridecanol, 6-9 EO

LC50/96h >1-10 mg/l (cyprinus carpio) (OECD 203 - Fish, Acute Toxicity Test)

EC50/48h >1-10 mg/l (daphnia magna) (OECD 202 - Daphnia sp. Acute immobilisation Test)

EC50/72h >1-10 mg/l (desmodesmus subspicatus) (OECD 201 - Alga, Growth Inhibition Test)

· 12.2 Persistence and degradability

Easily biodegradable

The surfactants contained in the product correspond to the legislation on the environmental compatibility of detergents and are biodegradable.

· 12.3 Bioaccumulative potential

No further relevant information available.

· 12.4 Mobility in soil

No further relevant information available.

· Ecotoxicological effects:

· Remark:

Harmful to fish

· Additional ecological information:

· General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

· 12.5 Results of PBT and vPvB assessment

· PBT:

Not applicable.

· vPvB:

Not applicable.

· 12.6 Other adverse effects

No further relevant information available.

13 Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

· Uncleaned packaging:

· Recommendation:

Disposal must be made according to official regulations.

· Recommended cleansing agents:

Water, if necessary together with cleansing agents.

14 Transport information

· 14.1 UN-Number

· ADR, ADN, IMDG, IATA

not regulated

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 05.02.2016

Version number 2

Revision: 05.02.2016

Trade name: Novalin D

(Contd. of page 6)

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|---|-----------------|
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA | not regulated |
| <ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class | not regulated |
| <ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA | not regulated |
| <ul style="list-style-type: none"> · 14.5 Environmental hazards: | Not applicable. |
| <ul style="list-style-type: none"> · 14.6 Special precautions for user | Not applicable. |
| <ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| <ul style="list-style-type: none"> · UN "Model Regulation": | not regulated |

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
 - H302 Harmful if swallowed.
 - H314 Causes severe skin burns and eye damage.
 - H318 Causes serious eye damage.
 - H351 Suspected of causing cancer.
 - H361d Suspected of damaging the unborn child.
 - H411 Toxic to aquatic life with long lasting effects.
- **Department issuing SDS:** Abteilung Produktsicherheit
- **Abbreviations and acronyms:**
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 - IMDG: International Maritime Code for Dangerous Goods
 - IATA: International Air Transport Association
 - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - VOC: Volatile Organic Compounds (USA, EU)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - Acute Tox. 4: Acute toxicity, Hazard Category 4
 - Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
 - Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
 - Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
 - Carc. 2: Carcinogenicity, Hazard Category 2
 - Repr. 2: Reproductive toxicity, Hazard Category 2

(Contd. on page 8)

Safety data sheet
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Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

(Contd. of page 7)

· * **Data compared to the previous version altered.**

EU