according to (EG) Nr. 1907/2006 (REACH) changed by regulation (EU) Nr. 453/2010)



NOxAMID® 40

Date/Revised: 24.11.2020

IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1 Product identifiers

Product name: NOxAMID® 40

Substance name: Urea solution 40% (Aqueous solution)

1.2 Use of the substance / mixture

Reducing nitrogen oxides. Means for the wood processing- and paper industries. Sewage treatment means.

1.3 Details of the supplier of the safety data sheet

Mehldau & Steinfath Umwelttechnik GmbH Alfredstraße 279 45133 Essen, Germany

Contact:

Phone: +49 (0)201 43 783 -0 Fax: +49 (0)201 43 783 -33 Email: zentrale@ms-umwelt.de

1.4 Emergency telephone number:

Poison emergency call: 24-h-emergency call of GGIZ: +49(0)228/19240 or +49(0)30/19240

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to regulation (EG) Nr. 1272/2008 (substances):

Not classified

Classification according to regulation EU-guidelines 67/548/EWG or 1999/45/EG:

Not classified

2.2 Label elements

Labeling according to regulation (EG) Nr. 1272/2008 (substances)

Unnecessary

Labeling (67/548/EWG or 1999/45/EG):

Unnecessary

2.3 Other hazards

The substance does not meet the criteria for PBT or vPvB according to the regulation (EC) Nr. 1907/2006, appendix XIII.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

according to (EG) Nr. 1907/2006 (REACH) changed by regulation (EU) Nr. 453/2010)



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Not specified, s. mixture

3.2 Chemical characterisation

Chemical characterisation: Urea in aqueous solution

Composition based of:

Urea, weight (W/W): 40 % 57-13-6 **EG-Nr.**: 200-315-5

REACH-Nr.: 01-2119463277-33-XXXX

Water; weight (W/W): 60 % 7732-18-5 **EG-Nr.**: 231-791-2

4. FIRST AID MEASURES

4.1 Description of first aid measures

General Information: If symptoms persist, call a doctor. Show the doctor this Savety Data

Sheet.

After inhalation: Provide fresh air.

After skin contact: Wash thoroughly with copious water.

After eye contact: After contact with eyes, rinse immediately with copious water. Consult

a doctor in case of complaints.

After swallow: Flush mouth, drink copious water. Medical advice.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention or special treatment needed

No further relevant information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents: The product is not flammable.

Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

Ambient air independent breathing apparatus (EN 133)

according to (EG) Nr. 1907/2006 (REACH) changed by regulation (EU) Nr. 453/2010)



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Additional information:

The product is not flammable. Use fire extinguishing methods suitable to surrounding conditions. In case of fire the following can be released: NH₃

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Particular danger of slipping on leaked product.

6.2 Environment precautions

Not into the drains / surface water / should not release into groundwater.

6.3 Methods and materials for containment and cleaning up

Soak up with absorbent material (for example sand, diatomaceous earth, universal binder). Send in suitable containers for recovery or disposal. Flush away residues with water.

6.4 Reference to other sections

No

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Fire precautions: This product is not flammable. No special measures required.

Explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Information on storage conditions: Avoid seepage into the ground.

Needs container: Suitable materials for containers: Polyethylen of high density

(HDPE), Polyethylen of low density (LDPE), high-grade steel 1.4301

(V2), high-grade steel 1.4401 (V4), glass.

Unsuitable materials for containers: Paper, iron, tin (tinplate).

Storage class according to VCI: 13 – non-combustible materials.

7.3 Specific end applications

No

according to (EG) Nr. 1907/2006 (REACH) changed by regulation (EU) Nr. 453/2010)



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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

Occupational exposure limit: no

Organic occupational exposure limit: no

8.2 Exposure controls and personal protective equipment

Personal protective equipment:

Eye protection:

Tightly sealed safety glasses according to EN 166

Breathing protection:

Breathing protection by inadequate ventilation.

Gas filter for non-organic gas/fumes (EN 14387 type B).

Hand protection:

Chemical resistant protective gloves (EN 374)

Natural rubber / natural latex (NR) – 0.5 mm coating thickness

Chloroprene rubber (CR) – 0.5 mm coating thickness

Nitrile rubber (NBR) – 0.4 mm coating thickness

Butyle rubber (Butyl) – 0.7 mm coating thickness

Fluorrelastomer (FKM) - 0.7 mm coating thickness

Polyvinyl chloride (PVC) - 0.7 mm coating thickness

General protective and hygienic measures:

No special protective equipment required. Avoid contact with the eyes and skin.

Please follow the usual instructions when handling with chemicals.

Wash hands before breaks and at the end of work.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Aggregate state: liquid colourless Odour: lightly ammonia

pH-value (20°C): ca. 9 – 10 (DIN/ISO 976)

Solidification temperature:

Boiling point:

Flashpoint:

Flammability:

Ignition temperature:

Oxidizing properties:

ca. 0 °C

ca. 100 °C

no data available

non flammable

inapplicable

not oxidizing

Thickness (20 °C): ca. 1.112 g/ml (ISO 2811-3)

according to (EG) Nr. 1907/2006 (REACH) changed by regulation (EU) Nr. 453/2010)



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Solubility in water: good soluble

Viskosität, dynamisch: ca. 1,6 mPa.s (DIN/EN/ISO 3219, Anhang A)

10. STABILITY AND REACTIVITY

10.1 Reactivity

Solid by normal ambient temperature and normal pressure.

10.2 Chemical stability

Solid by normal conditions. No decomposition if used according to specifications

10.3 Possibility of hazardous reactions

Strongly with nitrides. With strong oxidants.

10.4 Conditions to avoid

Container and product must be protected from direct sunlight.

10.5 Incompatible materials

Copper, copper alloys, galvanized steel

10.6 Hazardous decomposition products

Hazardous decomposition products: ammonia.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute orally toxicity: Dosis LD50: 14,300 mg/kg

Species: Rat

Based on urea.

Irritant effect on the skin: Test substance: Urea

Result: non irritating

Irritant effect on the eye: Test substance: Urea

Result: non irritating

Sensitisation: Test substance: Urea

Result: non sensitizing

Mutagenicity: Test substance: Urea

Result: not mutagenic

Toxicity by repeated dose: Application: Orally

Test substance: Urea

NOAEL: 2,250 mg/kg

Species: Rat

according to (EG) Nr. 1907/2006 (REACH) changed by regulation (EU) Nr. 453/2010)



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Teratogenicity: Test substance: urea

NOAEL: 500 mg/kg

Species: rat

Additional information: There are no observations that indicate hazardous properties.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity: Test substance: urea

Dosis LC50: > 6,810 mg/l

Spezies: Leuciscus idus (Goldorfe)

Exposure time: 96 h

Daphnientoxizität: Test substance: urea

Dosis EC50: 10,000 mg/l

Spezies: Daphnia magna (Großer Wasserfloh)

Exposure time: 24 h

12.2 Persistence and degradability

Biodegradation: Test substance: urea

Readily biodegradable.

12.3 Bioaccumulative potential

Bioaccumulation: Test substance: urea

No bioaccumulation.

12.4 Mobility in soil

Mobility in soil: No further relevant information available

12.5Results of PBT- and vPvB-assessment

This mixture contains no ingredients, which are persistent, bioaccumulative or toxic.

12.6 Other adverse effects

Additional ecological information: Slightly water hazardous.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal of product residuals:

Must be supplied to a proper disposal, in compliance with the regulations for waste recycling and - disposal.

Classification of waste has to take place, ancestry oriented, to the regulation of the European Waste Catalogue (AVV).

according to (EG) Nr. 1907/2006 (REACH) changed by regulation (EU) Nr. 453/2010)



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Uncleaned packaging:

Disposal must be made according to official regulations; contaminated packages have to be treated like substance. Packaging has to be emptied. Then they can be supplied after being thoroughly cleaned for reuse.

14. TRANSPORT INFORMATION

Not a hazardous material according to transport regulations. (ADR RID ADNR IMDG/GGVSEE ICAO/IATA)

15. REGULATORY INFORMATION

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

EINECS-nr.: 200-315-5

Does not require labeling

All ingredients of our products have been pre-registered according to EU-Regulation nr. 1907/2006

(REACH).

Does not require labeling

European Union regulation: 1907/2006 (EG)

Regulation (EG) Nr. 1272/2008

Regulation: 67/548/EWG

1999/45/EG

National Regulation (Germany): Statutory order on hazardous

incidents: not regulated

Water hazard class: WGK 1, slightly hazardous to water according to VwVwS attached 2.

Technical instructions

on air quality (TA Luft): TA-Luft Nr. 5.2.1 total dust incl. fine dust

Other regulations: no employment restriction

15.2 Chemical safety assessment:

A chemical safety assessment has been carried out.

16. OTHER INFORMATION

More Information:

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