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

- · 1.1 Product identifier
- · Trade name: NU-Gläserspültabletten
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against: -
- · Application of the substance / the preparation: Dishwasher detergent
- · 1.3 Details of the supplier of the safety data sheet
- · Supplier/Manufacturer:

Höller-Chemie Schützenstr. 20 58339 Breckerfeld Tel.: +49-2338-872277 Fax: +49-2338-871633

- · Email competent person: sds@kft.de
- · Information department: See supplier/manufacturer
- · 1.4 Emergency telephone number:

GIZ-Nord, Göttingen, Germany

+49 551 19240

SECTION 2: Hazards identification

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



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.

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



GHS05

- · Signal word Danger
- · Hazard-determining components of labelling:

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine Alcohols, C16-18, ethoxylated

· Hazard statements

H318 Causes serious eye damage.

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. P103 Read label before use.

P280 Wear protective gloves / eye 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.

P310 Immediately call a POISON CENTER/doctor.

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Dispose of contents/container to a hazardous or special waste collection point.

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• Other notes: Further labelling requirements of EC regulation 648/2004/EC annex VII have to be observed.

· 2.3 Other hazards

P501

- · Results of PBT and vPvB assessment
- · PBT: Not applicable · vPvB: Not applicable

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 68439-49-6	Alcohols, C16-18, ethoxylated	5-10%
	Acute Tox. 4, H302; Aquatic Chronic 3, H412	
CAS: 68439-49-6	Alcohols, C16-18, ethoxylated	1-5%

CAS: 68439-49-6 Alcohols, C16-18, ethoxylated NLP: 500-212-8 Eye Dam. 1, H318; Aquatic Acute 1, H400; Acute Tox. 4, H302; Aquatic Chronic 3,

H412

CAS: 68411-30-3 Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 1-5%

EINECS: 270-115-0 Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Irrit. 2, H315; Aquatic Chronic 3, H412

REACH-no: 01-2119489428-22-xxxx

CAS: 2372-82-9 N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine < 1%

EINECS: 219-145-8 Acute Tox. 3, H301; STOT RE 2, H373; Skin Corr. 1A, H314; Aquatic Acute 1, H400

REACH-no: 01-2119980592-29-xxxx (M=10); Aquatic Chronic 1, H410

Regulation (EC) No 648/2004 on detergents / Labelling for contents:

non-ionic surfactants 5 - 15%

anionic surfactants < 5%

Laurylamine Dipropylenediamine

· Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: If symptoms persist or in case of doubt, seek medical advice.
- · After inhalation: Inhalation of product unlikely. If forming dust is inhaled when handling the product, supply fresh air.
- · After skin contact: Generally the product does not irritate the skin.
- After eye contact:

Protect unharmed eye.

Rather unlikely if used appropriately.

Rinse the eyes with open eyelids for 10 - 15 minutes with water. Then consult an eye specialist immediately.

After swallowing:

Rinse mouth with water.

Drink plenty of water, but never give anything to an unconscious person.

If babies/toddlers are concerned, always consult a physician or the local Poison Information Centre.

4.2 Most important symptoms and effects, both acute and delayed

Irritation of eyes and mucous membrane

Serious damage to eyes

· 4.3 Indication of any immediate medical attention and special treatment needed Symptomatic treatment

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SECTION 5: Firefighting measures

· 5.1 Extinguishing media

- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents: No data available
- · 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Carbon dioxide (CO₂)

Toxic pyrolyzates Organic pyrolyzates

· 5.3 Advice for firefighters

· Protective equipment:

Do not inhale combustion vapours.

Wear self-contained respiratory protective device.

Wear a fully protective suit.

Additional information:

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

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Avoid formation of dust.

Avoid contact with eyes and skin.

6.2 Environmental precautions:

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

Do not allow to penetrate the ground/soil.

Inform authorities in case of gas release.

In case of seepage into the ground inform responsible authorities.

6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Avoid any dust formation. Pick up with a tested and approved industrial vacuum cleaner if necessary.

Make sure to recycle or dispose of in suitable receptacles.

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.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Avoid contact with eyes and skin.

Any deposit of dust which cannot be avoided must be regularly removed.

Prevent formation of dust.

Information about protection against explosions and fires:

Dust may combine with air to form an explosive mixture.



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Observe the general rules of industrial fire protection.

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- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Store at ambient temperatures and under dry conditions.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from feed.

Refer to national regulations for storing hazardous chemicals.

- Further information about storage conditions: Protect from humidity and water.
- · Storage class: 10-13 other combustible and non-combustible substances
- · 7.3 Specific end use(s) Follow the directions!

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical systems: Mechanical ventilation/exhaustion is strongly recommended.
- · 8.1 Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures should be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Vacuum contaminated clothing. Do not blow or brush off contamination.

Avoid contact with eyes and skin.

Provide eye bath.

The following instructions regarding the protective equipment refer to the industrial use of larger quantities.

· Breathing equipment:

Under normal conditions of use not required

In case of unintended release:

Short term filter device:

Filter P1

· Protection of hands:

If used properly, not required for consumers

Upon longer contact:

Chemical resistant gloves (EN 374)

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

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

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

· Material of gloves:

For undissolved solid substances following materials may be suitable:

nitrile rubber (NBR), butyl rubber (BR), fluorocarbon rubber (FKM) and polychloroprene rubber (CR)

Rubber

PVC

The selection of suitable gloves depends upon the material, and also upon the quality of the gloves. The degree of protection will vary 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:

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

· Eye protection:

If large quantities are handled: safety glasses are recommended.

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Tightly sealed goggles

· Body protection: Protective work clothing

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SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information:

· Appearance:

Form: Tablets
Colour: White
Odourless
Odour threshold: Not determined

• pH-value: Not applicable

· Change in condition:

Melting point/Melting range: Not determined Boiling point/Boiling range: Not determined

• Flash point: Not applicable

· Flammability (solid, gaseous): Not determined

· Ignition temperature:

Decomposition temperature: Not determined

· Self ingnition temperature: Product is not self-igniting.

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

Not determined

Not applicable

· Explosion limits:

· Evaporation rate:

Lower:

Upper: Not determined

· Vapour pressure: Not applicable

· Density: Not determined

· Relative density: Not determined

· Vapour density: Not applicable

· Solubility in / Miscibility with

Water: Soluble

· Viscosity:

dynamic: Not applicable **kinematic:** Not applicable

• 9.2 Other information No further relevant information available

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

Decomposition at contact with humid air

To avoid thermal decomposition do not overheat.

No decomposition if used and stored according to specifications

- · 10.3 Possibility of hazardous reactions No dangerous reactions known
- · 10.4 Conditions to avoid No further relevant information available

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· 10.5 Incompatible materials:

Strong acids Strong bases Strong oxidants

No further relevant information available

· 10.6 Hazardous decomposition products:

No hazardous decomposition products if instructions for storage and handling are followed

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- LD/LC50 values that are relevant for classification:

ATE oral: 4600 mg/kg

68439-49-6 Alcohols, C16-18, ethoxylated

Oral LD₅₀ 1280 mg/kg (rat) Dermal LD₅₀ >2000 mg/kg (rabbit)

68439-49-6 Alcohols, C16-18, ethoxylated

Oral LD₅₀ >300-2000 mg/kg (rat)

68411-30-3 Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Oral LD₅₀ 1080 mg/kg (rat) (OECD 401)

concentration of CAS 68411-30-3: 100%

Dermal $LD_{so} > 2000 \text{ mg/kg (rat) (OECD 402)}$

2372-82-9 N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

Oral LD₅₀ 261 mg/kg (rat) (OECD 401)

Dermal LD₅₀ > 2000 mg/kg (rat)

- · Primary irritant effect:
- · Skin corrosion/irritation Irritation to skin and mucous membrane possible
- · Serious eye damage/irritation

Causes serious eye damage.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- 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 Not relevant

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

There are no quantitative data available for the product itself.

68439-49-6 Alcohols, C16-18, ethoxylated

LC₅₀ >1-10 mg/l (Leuciscus idus) (DIN EN ISO 7346-2)

LC_{so}/96h 0.46-1 mg/l (Brachydanio rerio)

(25 mol EO)

1-10 mg/l (Leuciscus idus)

EC₅₀ >0.1-1 mg/l (Scenedesmus subspicatus)

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EC_o >100 mg/l (Pseudomonas putida)

68439-49-6 Alcohols, C16-18, ethoxylated

LC₅₀ >1-10 mg/l (Leuciscus idus) (DIN EN ISO 7346-2)

LC₅₀/96h 0.46-1 mg/l (Brachydanio rerio)

(25 mol EO)

1-10 mg/l (Leuciscus idus)

EC₅ >0.1-1 mg/l (Scenedesmus subspicatus) EC₀ >100 mg/l (Pseudomonas putida)

68411-30-3 Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

 $LC_{50}/96h$ > 1-10 mg/l (Cyprinus carpio)

OECD 203

1.67 mg/l (Lepomis macrochirus) (US EPA) 1 mg/l (Lepomis macrochirus) (OECD 204)

EC_{so}/48h (static) 2.9 mg/l (Daphnia magna) (OECD 202)

OECD 202

EC_{so}/72h > 10-100 mg/l (Scenedesmus subspicatus)

OECD 201

2372-82-9 N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

LC₅₀/96h 0.431 mg/l (Brachydanio rerio) (OECD 203)

0.68 mg/l (Oncorhynchus mykiss)

 EC_{so} (static) 42.2 mg/l (activated sludge, domestic) (OECD 209)

EC₅₀/48h 0.0775 mg/l (Daphnia magna) (OECD 202) NOEC/21d 0.024 mg/l (Daphnia magna) (OECD 211)

 E_bC_{50} (static) 0.01 mg/l (Scenedesmus capricornutum) (OECD 201)

- · 12.2 Persistence and degradability The biological degradation of the surfactants complies with the requirements of EC 648/2004.
- · Other information: The product is readily biodegradable.
- · 12.3 Bioaccumulative potential No further relevant information available
- · 12.4 Mobility in soil No further relevant information available
- · Ecotoxical effects:
- \cdot Other information: If used according to specifications, no problems in sewage plants
- · Additional ecological information:
- · General notes:

NOEC/28 d

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

According to appendix 4 of VwVwS dated 17.05.1999 (German regulation)

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

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

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable
- · vPvB: Not applicable
- · 12.6 Other adverse effects No further relevant information available

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Must be recycled or disposed of according to the regulations. Waste has to be classified according to the European Waste Catalogue based on the identification of the waste generating source.

Disposal according to instructions of local authorities

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· European waste catalogue:

20 00 00 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS

20 01 00 separately collected fractions (except 15 01)

20 01 29* detergents containing hazardous substances

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Void	
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	Void	
· 14.4 Packing group · ADR, IMDG, IATA	Void	
· 14.5 Environmental hazards: · Marine pollutant:	No	
· 14.6 Special precautions for user · Stowage Category	Not applicable A	
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable		
· Transport/Additional information:	Protect from moisture.	
· UN "Model Regulation":	Void	

SECTION 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 100 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- · National regulations
- · Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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

H301 Toxic if swallowed.

H302 Harmful if swallowed.

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H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

· Department issuing MSDS:

KFT Chemieservice GmbH Im Leuschnerpark. 3 64347 Griesheim Postfach 1451 64345 Griesheim Germany

Phone: +49 6155 86829-0 Fax: +49 6155 86829-25

Safety Data Sheet Service: +49 6155 86829-22

Contact: Dr. Sonja Fischer

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of

Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Acute Tox. 3: Acute toxicity, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Čategory 1

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

Sources: MSDSs of the suppliers

* Data compared to the previous version altered.

Changes have been made to sections marked with a *, as compared to the previous version.