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Date of issue: 12.09.2017 Replaces Data Sheet of: 03.11.2014

"*" alterations as compared to previous version; n.ap. = not applicable; n.av. = not available



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

1.1 Product identifier

Trade Name: ceragol Ultra® Geräteentkalker

Article No.: A08018680 / A08018581

Preparation No.: 013
Registration No.: n.ap.

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

Identified uses: descaler tabs

1.3 Details of the supplier of the safety data sheet

1.3.1 Address of the Company / Supplier:

ceragol international GmbH, Grundstrasse 41, CH- 8196 Wil

Telephone: +41 (0)44 879 16 31, Telefax: +41 (0)44 879 16 32, E-Mail: safety@ceragol.com

1.3.2 Responsible for the data sheet:

CoSiChem AG, Ernst-Lemmer-Straße 23, D - 35041 Marburg, info@cosichem.de

1.4 Emergency telephone number

Emergency - Telephone of Company / Undertaking Information Centre Specialising in Symptoms of

Poisoning

Telephone: +41 (0)44 879 16 31 (8:00 – 16:30)

Telephone: +44 870 600 6266

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification and labelling according to Directive 1272/2008/EC:

Eye Irrit. 2 H319 / Skin Irrit. 2 H315 / Aquatic Chronic 3 H412

2.2 Label elements

Classification according to 1272/2008/EC: Yes.

Applicable Exemptions: No. Signal word(s): Warning

Component(s):

Hazard pictogram(s):

H - Phrases:

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H412: Harmful to aquatic life with long lasting effects.

P - Phrases:

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

P102: Keep out of reach of children.

P260: Do not breathe dust.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P302+P352: IF ON SKIN: Wash with plenty of water

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P301+P315: IF SWALLOWED:Get immediate medical advice/attention.

P273: Avoid release to the environment.

P501: Dispose of contents/container to household waste.

Additional Markings: None.

The above mentioned labelling is valid for distribution to industrial user/ private consumer.

2.3 Other hazards

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

This mixture contains no substances which are assessed to be PBT or vPvB.



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SECTION 3: Composition/information on ingredients

3.1 Substances

n.ap.

3.2 Mixtures

Chemical Characterisation:

Mixture

Dangerous Ingredients:

| zangoroao mgroa | | | | |
|----------------------------------------------------------|-------------------------------------------|-----------------------------------|-----------------------|---------------|
| Material CAS - No. Hazard Code(s) / H - | Index - No. phrases | EC - No. | REACH - No. | m% - range |
| Sulphamidic acid 5329-14-6 Eye Irrit. 2; H319 / Sk | 016-026-00-0 kin Irrit. 2; H315 / Aqua | 226-218-8 atic Chronic 3; H412 | 01-2119488633-28-xxxx | 50 - 60% |
| Sodium carbonate 497-19-8 Eye Irrit. 2; H319 | 011-005-00-2 | 207-838-8 | 01-2119485498-19-xxxx | 1 - 10% |
| Adipic acid 124-04-9 Eye Irrit. 2; H319 | 607-144-00-9 | 204-673-3 | 01-2119457561-38-xxxx | 1 - 10% |

Text of H - phrases: see section 16

m% - range: $x - y \triangleq x \ge - < y$

SECTION 4: First aid measures

4.1 Description of first aid measures

4.1.1 Inhalation:

Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. If symptoms persist, call a physician.

4.1.2 Skin Contact:

Wash off with soap and water.

If skin irritation persists, call a physician.

4.1.3 Eye Contact:

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

4.1.4 Ingestion:

Do not induce vomiting. Clean mouth with water and afterwards drink plenty of water.

Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Ingestion may provoke the following symptoms: cough.

May cause respiratory irritation. May cause irritation of the mucous membranes.

According to concentration, aqueous solution causes irritation or burns of eyes, skin and mucous membranes.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

5.1.1 Suitable Extinguishing Media:

Use dry chemical, CO₂, water spray or "alcohol" foam.

5.1.2 Extinguishing Media to Avoid:

None.

5.2 Special hazards arising from the substance or mixture

In the event of fire the following can be released:

respirable dust sulphur oxides nitrogen oxides (NOx) ammonia

5.3 Advice for firefighters

5.3.1 Special Protective Equipment:

Wear positive pressure self-contained breathing apparatus. Wear full protective clothing.

5.3.2 Additional Information:

Knock down dust with water spray jet. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

See chapter 8.2.2

Avoid dust formation.

6.2 Environmental precautions

Do not contaminate water. Do not empty into drains.

Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Use mechanical handling equipment. Avoid dust formation.

Sweep up and shovel into suitable containers for disposal.

6.4 Reference to other sections

None.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

7.1.1 Precautions for Safe Handling:

Do not breathe dust. Avoid contact with skin and eyes.

When using, do not eat, drink or smoke.

Wash hands before breaks and at the end of workday.

Take off all contaminated clothing immediately.

7.1.2 Precautions in Case of Fire and Explosion:

Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

7.2.1 Storage Instructions:

Keep container tightly closed in a dry and well-ventilated place. Store in original container.

Never allow product to get in contact with water during storage.

7.2.2 Store away from:

Do not store together with strong bases strong oxidizing agents.

7.2.3 Further Information on Storage Conditions:

Ensure adequate ventilation.

7.3 Specific end use(s)

n.av.

SECTION 8: Exposure controls/personal protection

8.1 **Control parameters**

Material Limit Value

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Provide for appropriate exhaust ventilation and dust collection at machinery.

8.2.2 Individual protection measures

8.2.2a Respiratory Protection: In the case of respirable dust, use self-contained breathing apparatus.

Recommended filter type: P 2

8.2.2b **Hand Protection:** Protective gloves complying with EN 374.

nitrile rubber (0,5mm) break through time > 8h

The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the

producer of the protective glove.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the

danger of cuts, abrasion, and the contact time.

8.2.2c **Eye Protection:** Tightly fitting safety goggles 8.2.2d* **Skin Protection:** Long sleeved clothing

8.2.2e Further Information: Observe wearing time limits: Not relevant

8.2.3 Environmental exposure controls:

n.av.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

9.1.1 Form: tablet Colour: white Odour: characteristic

| 3.1.1 | Form: tablet | Colour: | white | | Odour: | characteristic | 3 |
|--------|--------------------------------------|---------|--------|-------------------------|------------|----------------|---|
| | | | | Odour th | reshold: | n.av. | |
| 9.1.2 | pH-value, undiluted: | | n.ap. | | | | |
| | pH-value, 1% aqueous solution: | | ~ 1,6 | | | | |
| 9.1.3 | Boiling point / Boiling - range (°C) | : | n.av., | Melting point / Melting | g range (° | C): n.av. | |
| 9.1.4 | Flash point (°C): | | n.ap., | closed cup | | ŕ | |
| 9.1.5 | Flammability (EEC A10/A13): | | n.ap. | · | | | |
| 9.1.6 | Ignition temperature (°C): | | n.ap. | | | | |
| 9.1.7 | Autoflammability (EEC A16): | | n.ap. | | | | |
| 9.1.8 | Oxidising properties: | | No. | | | | |
| 9.1.9 | Explosion hazard: | | n.ap. | | | | |
| 9.1.10 | Explosion limits (Vol.%) lower: | | n.ap., | upper: n.ap. | | | |
| 9.1.11 | Vapour pressure: | | n.ap. | | | | |
| | Vapour density (Air = 1): | | n.av. | | | | |
| 9.1.12 | Density (g/ml): | | n.av. | | | | |
| 9.1.13 | Solubility (in Water): | | solubl | e | | | |
| 9.1.14 | Partition coefficient, n-Octanol / W | /ater: | n.ap. | | | | |
| 9.1.15 | Viscosity: | | n.av. | | | | |
| 9.1.16 | Solvent content (m %): | | n.ap. | | | | |
| 9.1.17 | Thermal decomposition (°C): | | n.av. | | | | |
| 9.1.18 | Evaporation rate: | | n.av. | | | | |
| 9.2 | Other information | | | | | | |
| | n.av. | | | | | | |

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Protect against humid air and water.

10.5 Incompatible materials

Incompatible with strong bases and oxidizing agents.

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

To avoid thermal decomposition, do not overheat.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute Health Effects:

Inhalation: n.av.

Ingestion: Sulfamidsäure: LD₅₀/oral/rat = 3160 mg / kg (RTECS)

Skin Contact: n.av.

Skin corrosion / irritation:

Serious eye damage / irritation:

Causes skin irritation.

Causes serious eye irritation.

Respiratory or skin sensitisation:
Germ cell mutagenicity:
n.av.
Carcinogenicity:
n.av.
Reproductive toxicity:
n.av.
STOT-single exposure:
n.av.
STOT-repeated exposure:
n.av.
Aspiration hazard:
n.av.

11.1.1 - Practical Experience

11.1.11 n.av.

11.1.12 Practical Experience

Observations relevant for classification:

None

Further Observations:

None.

Classification of the preparation has been done by calculation in accordance with EEC directives.

SECTION 12: Ecological information

12.1 Toxicity

Sulphamidic acid: Fathead minnow LC₅₀ (96h): 14,2 mg/l / 70,3 mg/l

We have no quantitative data concerning the ecological effects of this product.

12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

n.av.

12.4 Mobility in soil

n.av.

12.5 Results of PBT and vPvB assessment

n.av.

12.6 Other adverse effects

 12.6.1
 COD-Value, mg/g:
 n.av.

 12.6.2
 BOD5-Value, mg/g:
 n.av.

12.6.3AOX-Remarks:Not applicable.12.6.4Significant Components:Amidosulfonsäure12.6.5Other adverse effects:Not applicable.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Recommendation: R5 Waste - Code - No.: 20 01 29

The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

In addition comply with the regional authorities.

13.2 Contaminated Packaging

- 13.2.1 Recommendation: Wash with suitable cleaner. Otherwise as described under Residues.
- 13.2.2 Safe Handling: As described under Residues.

| | Safety Data | Sheet in | Accordance | with | regulation | 2015/830 |
|--|-------------|----------|------------|------|------------|----------|
|--|-------------|----------|------------|------|------------|----------|

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| SECTION 14 | 1: Transport | information |
|------------|--------------|-------------|
|------------|--------------|-------------|

| ADR | IMDG | IATA |
|--------------------------------------------------------------|---------------------------------|----------------------------------|
| Not a dangerous substance as de | fined in the above regulations. | |
| UN number | | |
| | | |
| UN proper shipping name | | |
| | | |
| Transport hazard class(es) | | |
| | | |
| Packing group | | |
| Environmental hazards | | |
| Special precautions for user | | |
| Transport category: Classification Code: Hazard - No.: | | Packing Instructions (Passenger) |
| LQ: | | Packing Instructions (Cargo) |
| Transport in bulk according to A | Annex II of MARPOL73/78 and th | he IBC Code |
| | | |

SECTION 15: Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- 15.2 Chemical safety assessment : n.ap.

SECTION 16: Other information

Text of H phases mentioned in Section 3

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H412: Harmful to aquatic life with long lasting effects.

This datasheet has been compiled in accordance with EU regulation 2015/830.

The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product's properties. They must neither be altered nor transferred to other products.

Prepared by: CoSiChem AG, Ernst-Lemmer-Straße 23, D - 35041 Marburg, info@cosichem.de, +49-6421-886563 Receipt of Data: 10.09.2012, \$ctg_0003