

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 20.02.2018

Version number 103

Revision: 07.07.2017

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

- 1.1 Product identifier

- Trade name **Cleanet© KR5 Geräteentkalker**

- Article number: 800510

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

No further relevant information available.

- Application of the substance / the mixture Deliming agent

- 1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier:

Nette Papier GmbH
Elliehäuser Weg 7-11
37079 Göttingen
Tel.: 0551 69470
Mail: goettingen@nette-papier.de

- Informing department:

Qualitätsmanagement
Frau Ulrike Fricke 05 51 / 69 47 29
Mail: quality@nette-papier.de

- 1.4 Emergency telephone number:

Poison Control Center, Mainz
Tel. 00 49 / 61 31 / 19 240

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008

Met. Corr.1 H290 May be corrosive to metals.
Skin Corr. 1A H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

- 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 statements

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

- Precautionary statements

P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of acid soap and water.
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.
P406 Store in a corrosion resistant container / container with a resistant inner liner.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of the substances listed below with harmless additions (aqueous solution).

- Dangerous components:

CAS: 77-92-9 EINECS: 201-069-1 Reg.nr.: 01-2119457026-42	citric acid	Eye Irrit. 2, H319	10-25%
CAS: 5329-14-6 EINECS: 226-218-8 Reg.nr.: 01-2119488633-28	sulphamidic acid	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	10-25%

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

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General advice:** In case of unconsciousness bring patient into stable side position for transport.
- **After inhalation** Supply fresh air.
- **After skin contact**
Remove contaminated clothing immediately. Wash affected areas with plenty of water und soap. If irritation continues, contact a doctor.
- **After eye contact** Rinse immediately opened eye for several minutes under running water. Then consult doctor.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; instantly call for medical help.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Information for doctor**
Cleaning of the stomach should only be carried out with endotracheal intubation. Danger of aspiration. Renew lipid coating of the skin in order to protect against dermatitis. Symptomatic treatment.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media** Use fire fighting measures that suit the environment.
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment and keep unprotected persons away.
- **6.2 Environmental precautions:**
Do not allow to enter drainage system, surface or ground water.
If large amounts are released, the authorities must be informed.
- **6.3 Methods and material for containment and cleaning up:**
Dilute with much water.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Ensure adequate ventilation.
Contaminated material has to be disposed as waste (see 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 information on disposal.

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SECTION 7: Handling and storage

- 7.1 Precautions for safe handling

Keep containers tightly sealed.
Prevent formation of aerosols.
Avoid contact with eyes and skin.

- **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.

- 7.2 Conditions for safe storage, including any incompatibilities

- **Storage** Store in cool, dry conditions in well sealed containers.

- Requirements to be met by storerooms and containers:

Observe official regulations on storage and handling of water hazardous substances

- **Information about storage in one common storage facility:** Do not store together with alkalis (caustic solutions).

- Further information about storage conditions:

Protect from frost.
Keep container tightly sealed.

- **Storage class** 8 B L (VCI - Konzept, 2007)

- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- 8.1 Control parameters

- Components with critical 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.

- DNELs

5329-14-6 sulphamidic acid

Oral	DNEL (population)	5 mg/kg bw/day (Long-term - systemic effects)
Dermal	DNEL (worker)	10 mg/kg bw/day (Long-term - systemic effects)
	DNEL (population)	5 mg/kg bw/day (Long-term - systemic effects)
Inhalative	DNEL (worker)	70.5 mg/m ³ (Long-term - systemic effects)
	DNEL (population)	17.4 mg/m ³ (Long-term - systemic effects)

- PNECs

77-92-9 citric acid

PNEC aqua	0.44 mg/l (fresh water)
	0.044 mg/l (marine water)
PNEC sediment	3.46 mg/kg dw (fresh water)
	34.6 mg/kg dw (marine water)
PNEC soil	33.1 mg/kg dw (soil)
PNEC STP	>1,000 mg/l (sewage treatment plant)

5329-14-6 sulphamidic acid

PNEC aqua	0.048 mg/l (fresh water)
	0.0048 mg/l (marine water)
	2 mg/l (sewage treatment plant)
PNEC sediment	0.173 mg/kg (fresh water)
	0.0173 mg/kg (marine water)
PNEC soil	0.00638 mg/kg (soil)

- **Additional information:** The lists that were valid during the compilation were used as basis.

- 8.2 Exposure controls

- Personal protective equipment

- General protective and hygienic measures

Keep away from food, beverages and fodder.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Gases, fumes and aerosols should not be inhaled.

- **Breathing equipment:** Use breathing protection only when aerosol or mist is formed.

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- Protection of hands:

protective gloves

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

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

- Material of gloves

Natural rubber, NR

Butyl rubber, BR

Nitrile rubber, NBR

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

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

- Eye protection: Tightly sealed safety glasses.**- Body protection:**

Standard protective clothing. Chemical resistant safety-shoes or boots. If skin contact is possible, wear impenetrable protective clothing against this solvent.

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties**- General Information****- Appearance:**

Form:	Fluid
Colour:	White
- Smell:	Odourless
- Odour threshold:	Not determined.

- pH-value (10 g/l) at 20 °C: 1,8 - 2,4

- Change in condition

Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined

- Flash point: not applicable

- Inflammability (solid, gaseous) Not applicable.

- Decomposition temperature: Not determined.

- Self-inflammability: Product is not selfigniting.

- Explosive properties: Product is not potentially explosive

- Critical values for explosion:

Lower:	Not determined.
Upper:	Not determined.

- Vapour pressure: Not determined.

- Density at 20 °C	1,14 g/cm ³
- Relative density	Not determined.
- Vapour density	Not determined.
- Evaporation rate	Not determined.

- Solubility in / Miscibility with

Water: Insoluble

- Partition coefficient: n-octanol/water: Not determined.

- Viscosity:

dynamic:	Not determined.
kinematic:	Not determined.

- 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity see section 10.3

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- **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)
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

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:

77-92-9 citric acid

Oral	LD50	3,000 mg/kg (rat)
		5,040 mg/kg (mouse)

5329-14-6 sulphamidic acid

Oral	LD50	3,160 mg/kg (rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** no data
- **CMR effects (carcinogenicity, 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** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity

- Aquatic toxicity:

77-92-9 citric acid

LC 50 / 96 h	440-760 mg/l (Leuciscus idus)
EC 50 / 72 h	120 mg/l (Daphnia magna)

5329-14-6 sulphamidic acid

LC 50 / 96 h	70.3 mg/l (Pimephales promelas) (OECD 203 (Acute toxicity - fish))
EC 50 / 24 h	71.9 mg/l (Daphnia magna) (OECD 202)

- 12.2 Persistence and degradability

77-92-9 citric acid

Biodegradability	98 % (OECD 302 B) (2 d)
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- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxic effects:**

- Respiratory inhibition of communal activated sludge EC 20 (mg/l according to ISO 8192 B):

77-92-9 citric acid

EC 0	640 mg/l (Scenedesmus quadricauda) (7d)
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- **Additional ecological information:**
- **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

- 13.1 Waste treatment methods

The following advice is related to new material and not to any processed products. In case of a mixture with other products other disposal methods may become necessary. If in doubt seek advice from product supplier or from local authorities.

- Recommendation

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

A used product should be recycled or used in other contexts, otherwise be handed over to an appropriate disposal site.

- Waste disposal key number:

Since 01/01/99 the waste code numbers have not only been product-related but are also essentially application-related. The valid waste code number of the application can be obtained from the European waste catalogue.

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

- Recommendation:

Rented packaging: After optimal emptying, close immediately and return to the supplier without cleaning. Care should be taken that no other materials get into the packaging.

Other containers: After complete emptying and cleaning, send to be reconditioned or recycled.

SECTION 14: Transport information

- 14.1 UN-Number

- ADR, IMDG, IATA

UN1760

- 14.2 UN proper shipping name

- ADR

- IMDG, IATA

1760 CORROSIVE LIQUID, N.O.S. (SULPHAMIC ACID)
CORROSIVE LIQUID, N.O.S. (SULPHAMIC ACID)

- 14.3 Transport hazard class(es)

- ADR

- Class

- Label

8 (C9) Corrosive substances.
Corrosive substances.
8

- IMDG, IATA

- Class

- Label

8 Corrosive substances.
8

- 14.4 Packing group

- ADR, IMDG, IATA

III

- 14.5 Environmental hazards:

- Marine pollutant:

Not applicable.
No

- 14.6 Special precautions for user

- Kemler Number:

- EMS Number:

- Segregation groups

Warning: Corrosive substances.
80
F-A,S-B
Acids

- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

- Transport/Additional information:

- ADR

- Limited quantities (LQ)

- Excepted quantities (EQ)

5L
Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

- Transport category

- Tunnel restriction code

- Remarks:

3
E
Corrosive

- UN "Model Regulation":

UN1760, CORROSIVE LIQUID, N.O.S. (SULPHAMIC ACID), 8,
III

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SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **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 statements**
 - H290 May be corrosive to metals.
 - H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
 - P264 Wash thoroughly after handling.
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.
 - P302+P352 IF ON SKIN: Wash with plenty of acid soap and water.
 - 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.
 - P406 Store in a corrosion resistant container / container with a resistant inner liner.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **National regulations**
- **Information about limitation of use:** Employment restrictions concerning young persons must be observed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

- **Relevant phrases**
 - H315 Causes skin irritation.
 - H319 Causes serious eye irritation.
 - H412 Harmful to aquatic life with long lasting effects.
- **Contact:** see item 1: Informing department
- **Abbreviations and acronyms:**
 - LEV: Local Exhaust Ventilation
 - RPE: Respiratory Protective Equipment
 - RCR: Risk Characterisation Ratio (RCR= PEC/PNEC)
 - 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 Harmonized System of Classification and Labelling of Chemicals
 - CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)
 - 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)
 - TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)
 - ISO: International Organisation for Standardisation
 - DNEL: Derived No-Effect Level (REACH)
 - PNEC: Predicted No-Effect Concentration (REACH)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - vPvB: very Persistent and very Bioaccumulative
 - Met. Corr. 1: Corrosive to metals – Category 1
 - Skin Corr. 1A: Skin corrosion/irritation – Category 1A
 - Skin Irrit. 2: Skin corrosion/irritation – Category 2
 - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 - Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
- *** Data compared to the previous version altered.**