

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

1.1. Product identifier

Trade name : Nanotol Sanitär Cleaner Konzentrat
Type of product : Detergent

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Professional uses, Consumer use
Use of the substance/mixture : Cleaning agent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

CeNano GmbH & Co. KG
Paul-Huber-Str. 5
84405 Dorfen - Germany
T 0049 8081 952530 - F 0049 8081 95253111
www.cenano.de

Email competent person

sds@kft.de

1.4. Emergency telephone number

Emergency number : National Poison Information Service (NPIS)
24 hour national number : professionals only
0844 892 0111

National Health Service (NHS)
24 hour national number : consumer
England and Scotland: 111
Wales: 0845 46 47
Northern Ireland: call your local General Practitioner

Call 999 if there is a life-threatening incident.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category H319
2

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

Causes serious eye irritation.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning
Hazardous ingredients : Citric acid
Hazard statements (CLP) : H319 - Causes serious eye irritation
Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children
P264 - Wash hands thoroughly after handling
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

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according to Regulation (EC) No. 1907/2006 (REACH)

Security closing plug for children : Not applicable
Tactile warning : Not applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Citric acid	(CAS-No.) 77-92-9 (EC-No.) 201-069-1	5 - 10	Eye Irrit. 2, H319
Alcohols, C9-11, ethoxylated	(CAS-No.) 68439-46-3	2.5 - 5	Eye Irrit. 2, H319
Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl)dimethyl, ethoxylated, chlorides	(CAS-No.) 1554325-20-0	1 - 2.5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318
	(CAS-No.) 61788-90-7 (EC-No.) 263-016-9 (REACH-no) 01-2119490061-47-xxxx	0.1 - 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If medical advice is needed, have product container or label at hand.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth out with water. Drink plenty of water. Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : May cause irritation to the digestive tract.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : No information available.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Carbon monoxide. Carbon dioxide. Nitrogen oxides. Hydrogen chloride. Halogenated compounds.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information : Do not allow run-off from fire fighting to enter drains or water courses. Disposal must be done according to official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin and eyes. Spills of this product present a serious slipping hazard.

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according to Regulation (EC) No. 1907/2006 (REACH)

6.1.1. For non-emergency personnel

Protective equipment : Wear personal protective equipment.
Emergency procedures : Spill area may be slippery. Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Do not allow into drains or water courses. Avoid sub-soil penetration.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Take up large spills with pump or vacuum. Disposal must be done according to official regulations.
Other information : Shovel into suitable and closed container for disposal. Disposal must be done according to official regulations.

6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Liquid material is slippery. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Protect against frost. Store in a well-ventilated place.
Information about storage in one common storage facility : Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

In case of repeated or prolonged contact wear gloves. Acid-resistant protective gloves. Apply emollient cream. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Eye protection:

Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Sealed safety goggles. Face shield. Safety glasses

Skin and body protection:

Acid-resistant clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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Environmental exposure controls:

Avoid release to the environment.

Other information:

Avoid contact with skin and eyes. Wash hands before breaks and after work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: clear. yellowish.
Odour	: characteristic. slight. aromatic.
Odour threshold	: No data available
pH	: 2.1
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: $\approx 1 \text{ g/cm}^3$ (20°C)
Solubility	: Water: Miscible
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agent. Reducing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

ATE CLP (oral)	14108 mg/kg
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Alcohols, C9-11, ethoxylated (68439-46-3)	
LD50 oral rat	> 2000 mg/kg bodyweight
LD50 dermal rabbit	> 2000 mg/kg bodyweight
Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl)dimethyl, ethoxylated, chlorides (1554325-20-0)	
LD50 oral rat	> 300 - 2000 mg/kg
(61788-90-7)	
LD50 oral rat	300 - 2000 (OECD 401 method)
LD50 dermal rat	> 5000 (OECD 402 method)
Citric acid (77-92-9)	
LD50 oral	5400 mg/kg (mouse; eq. (OECD 401 method))
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 2.1
Serious eye damage/irritation	: Causes serious eye irritation. pH: 2.1
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: May cause pH changes in aqueous ecological systems.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

Alcohols, C9-11, ethoxylated (68439-46-3)	
LC50 fish 1	> 1 - 10 mg/l (96h;Oncorhynchus mykiss (Rainbow trout))
EC50 Daphnia 1	> 1 - 10 mg/l (48h; Daphnia magna)
EC50 Daphnia 2	(48h; Daphnia magna)
EC50 72h algae (1)	> 1 - 10 mg/l (72h; Sekeletonema costatum)

Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl)dimethyl, ethoxylated, chlorides (1554325-20-0)	
LC50 fish 1	> 10 - 100 mg/l (96h;Fish)
EC50 Daphnia 1	> 1 - 10 mg/l (48h;daphnia)
EC50 72h algae (1)	> 1 - 10 mg/l (72h;algae)

(61788-90-7)	
LC50 fish 1	> 1 - 10 (96h;Pimephales promelas;)
EC50 Daphnia 1	> 1 - 10 (48h;daphnia(OECD 202 method)
EC50 72h algae (1)	> 0.1 - 1 mg/l (72h; Pseudokirchneriella subcapitata(OECD 201 method)

Citric acid (77-92-9)	
LC50 fish 1	> 440 mg/l (48 h; Leuciscus idus melanotus; eq. (OECD 203 method))
EC50 Daphnia 1	1535 mg/l (24 h; Daphnia magna)
NOEC chronic algae	425 mg/l (8 d; Scenedesmus quadricauda)

12.2. Persistence and degradability

Nanotol Sanitär Cleaner Konzentrat	
Persistence and degradability	The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
Biodegradation	88 % (28d;)(OECD 301A method))

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according to Regulation (EC) No. 1907/2006 (REACH)

Alcohols, C9-11, ethoxylated (68439-46-3)	
Persistence and degradability	Readily biodegradable.
Biodegradation	> 60 % (OECD 301D method)

(61788-90-7)	
Persistence and degradability	Readily biodegradable.
Biodegradation	> 60 % (OECD 301B method)

Citric acid (77-92-9)	
Persistence and degradability	Readily biodegradable.
Biodegradation	100 % (19 d; (OECD 301E method))

12.3. Bioaccumulative potential

Nanotol Sanitär Cleaner Konzentrat	
Bioaccumulative potential	No additional information available.

Citric acid (77-92-9)	
Log Pow	< 0

12.4. Mobility in soil

Nanotol Sanitär Cleaner Konzentrat	
Ecology - soil	No additional information available.

12.5. Results of PBT and vPvB assessment

Component	
Alcohols, C9-11, ethoxylated (68439-46-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl)dimethyl, ethoxylated, chlorides (1554325-20-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
(61788-90-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Citric acid (77-92-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations. European waste catalogue.

Waste treatment methods : Disposal must be done according to official regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions.

European List of Waste (LoW) code : 20 01 29* - detergents containing dangerous substances
07 03 01* - aqueous washing liquids and mother liquors

HP Code : HP4 - "Irritant — skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

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14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

Nanotol Sanitär Cleaner Konzentrat - Alcohols, C9-11, ethoxylated

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Detergent Regulation : Labelling of contents:

Component	%
non-ionic surfactants, cationic surfactants, anionic surfactants	<5%

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Transport information. Classification according to Regulation (EC) No. 1272/2008 [CLP]. First aid measures. Handling and storage. Disposal considerations. Physical and chemical properties.

Toxicological information. General revision.

Section	Changed item	Change	Comments
2.1		Modified	
2.2		Modified	
4.1		Modified	
4.2		Modified	
9		Modified	
11		Modified	
13	Waste material code	Modified	
14		Removed	

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods

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according to Regulation (EC) No. 1907/2006 (REACH)

LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
vPvB	Very Persistent and Very Bioaccumulative

Data sources : MSDS of the supplier.
 Department issuing data specification sheet: : KFT Chemieservice GmbH
 Im Leuschnerpark. 3 64347 Griesheim
 Postfach 1451 64345 Griesheim
 Germany
 Phone: +49 6155-8981-400 Fax: +49 6155 8981-500
 Safety Data Sheet Service: +49 6155 8981-522
 Contact person : Dr. Sonja Fischer
 Other information : Version/s 1 is/are not available in this language.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Eye Irrit. 2	H319	Calculation method
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KFT SDS EU 01

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product