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

1.1. Product identifier

Trade name

Spezial 38 S

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

Use of the substance/mixture

Cleaning material/ Detergent

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

BÜFA Cleaning GmbH & Co. KG
August-Hanken-Str. 30
26125 Oldenburg

Telephone no.	+49 441 9317 0
Fax no.	+49 441 9317 100
Information provided by / telephone	Department product safety / +49 441 9317 108
E-Mail	sds-cleaning@buefa.de

1.4. Emergency telephone number

Poison Information Center Goettingen: +49 551 19240

SECTION 2: Hazards identification ***

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4	H302
Skin Corr. 1B	H314
Eye Dam. 1	H318
Met. Corr. 1	H290

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008
For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms *

Signal word

Danger

Hazard statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H290	May be corrosive to metals.

Precautionary statements

P280.2	Wear protective gloves/ eye/ face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water [or shower].

P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 or doctor.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains Amines, C12-C14-Alkyldimethyl-N-oxides; phosphoric acid

2.3. Other hazards

***

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients ***

3.2. Mixtures

Hazardous ingredients *

phosphoric acid

CAS No.	7664-38-2				
EINECS no.	231-633-2				
Registration no.	01-2119485924-24-XXXX				
Concentration	>=	25	<	50	%
Acute Tox. 4	H302				
Met. Corr. 1	H290				
Skin Corr. 1B	H314				

Concentration limits (Regulation (EC) No. 1272/2008)

Eye Irrit. 2	H319	>= 10 < 25 %	
Skin Corr. 1B	H314	>= 25 %	
Skin Irrit. 2	H315	>= 10 < 25 %	
cATpE oral	500	mg/kg	

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note B

Amines, C12-C14-Alkyldimethyl-N-oxides

CAS No.	308062-28-4				
EINECS no.	931-292-6				
Registration no.	01-2119490061-47-XXXX				
Concentration	>=	1	<	2,5	%
Eye Dam. 1	H318				
Aquatic Acute 1	H400				
Aquatic Chronic 2	H411				
Acute Tox. 4	H302				
Skin Irrit. 2	H315				

ATE oral 1.064 mg/kg

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Ensure supply of fresh air. Summon a doctor immediately.

After skin contact

Wash off immediately with soap and water.

After eye contact

In case of contact with the eyes rinse thoroughly with plenty of water or with an eye-cleaning solution.
Seek medical advice immediately.

After ingestion

Do not induce vomiting. Call in a physician immediately and show him the Safety Data Sheet.

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

There is no further relevant information available

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

There is no further relevant information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, Dry powder, Water spray jet, Extinguishing measures to suit surroundings

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible.

5.3. Advice for firefighters

Use self-contained breathing apparatus.
Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep people away and stay on the upwind side. Use breathing apparatus if exposed to vapours/dust/aerosol. Use personal protective clothing.

6.2. Environmental precautions

Do not allow to enter drains or waterways.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (eg sand, kieselguhr, universal binder). When picked up, treat material as prescribed under Section 13 "Disposal".

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary).
Containers in danger should be cooled with water.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in original packaging. Provide acid-resistant floor. Store product in closed containers.
Do not store together with: Alkalis
Protect from heat and direct sunlight.

7.3. Specific end use(s)

No information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

phosphoric acid … %

List	EH40	
Type	WEL	
Value	1	mg/m³
Short term exposure limit	2	mg/m³

phosphoric acid … %

List	IOELV	
Type	IOELV	
Value	1	mg/m³
Short term exposure limit	2	mg/m³

8.2. Exposure controls

General protective and hygiene measures

Observe the usual precautions for handling chemicals. Personal protective equipment must comply with the Regulation (EC) No 2016/425 and the resulting CEN standards. The following information on personal protective equipment (PPE) is to be understood as a suggestion. The selection of the necessary PPE must be considered by the employer depending on the activities to be carried out and the local conditions. If it is determined during the on-site risk assessment that there is no danger to the employee, there is no need to wear PPE or the scope of the PPE to be used can be adjusted accordingly.

Respiratory protection

Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, Filter B

Hand protection

Chemical resistant gloves

Appropriate Material	nitrile		
Material thickness	>=	0,7	mm
Breakthrough time	>	480	min

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leaktightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Eye protection

Tightly fitting safety glasses

Body protection

Acid-resistant protective clothing

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	Product specific
Melting point	
Remarks	not determined
Boiling point	
Remarks	not determined
Flammability	
evaluation	not determined
Explosion limits	
Remarks	not determined

Flash point

Value	>	100		°C

Ignition temperature

Remarks: not determined

Thermal decomposition

Remarks: Not relevant

pH value

Value	1,5	to	2,5	
Concentration/H2O	1	%		

Viscosity

Value	appr. 20	s
Method	DIN 53211 4 mm	

Solubility in other solvents

not determined

Octanol/water partition coefficient (log Pow)

Remarks: Not relevant

Vapour pressure

Remarks: not determined

Density

Value: appr. 1,15 kg/l

Vapour density

Remarks: not determined

Particle characteristics

Remarks: irrelevant (liquid)

9.2. Other information

Odour threshold

Remarks: No data available

Solubility in water

Remarks: miscible

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Product reacts with: Alkalis

10.2. Chemical stability

The product is stable.

10.3. Possibility of hazardous reactions

Reactions with alkalies.

10.4. Conditions to avoid

Protect from heat and direct sunlight.

Thermal decomposition

Remarks: Not relevant

10.5. Incompatible materials

Reactions with alkalies. Reactions with metals, with evolution of hydrogen.

10.6. Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

ATE	1.826	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)	

The classification criteria are met.

Acute oral toxicity (Components)

Amines, C12-C14-Alkyldimethyl-N-oxides

Reference substance	Amines, C12-C14-Alkyldimethyl-N-oxides	
Species	rat	
LD50	1064	mg/kg

Acute dermal toxicity

Based on available data, the classification criteria are not met.

Acute inhalational toxicity

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

evaluation: corrosive

The classification criteria are met.

Serious eye damage/irritation

evaluation: corrosive

The classification criteria are met.

Sensitization

Based on available data, the classification criteria are not met.

Sensitization (Components)

Based on available data, the classification criteria are not met.

Mutagenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity (STOT)

Single exposure

Based on available data, the classification criteria are not met.

Repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties with respect to humans

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

SECTION 12: Ecological information

12.1. Toxicity

Fish toxicity

Amines, C12-C14-Alkyldimethyl-N-oxides

Reference substance	Amines, C12-C14-Alkyldimethyl-N-oxides	
LC50	2,67	mg/l

Daphnia toxicity

Amines, C12-C14-Alkyldimethyl-N-oxides

Reference substance	Amines, C12-C14-Alkyldimethyl-N-oxides	
Species	Daphnia pulex	
EC50	3,1	mg/l

Algae toxicity

Amines, C12-C14-Alkyldimethyl-N-oxides

Reference substance	Amines, C12-C14-Alkyldimethyl-N-oxides	
IC50	0,143	mg/l

Bacteria toxicity

For this subsection there is no ecotoxicological data available on the product as such.

12.2. 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.Do not discharge product unmonitored into the environment.

Biodegradability

Amines, C12-C14-Alkyldimethyl-N-oxides

Reference substance	Amines, C12-C14-Alkyldimethyl-N-oxides
evaluation	biodegradable

12.3. Bioaccumulative potential

For this subsection there is no ecotoxicological data available on the product as such.

Octanol/water partition coefficient (log Pow)

Remarks	Not relevant

12.4. Mobility in soil

For this subsection there is no ecotoxicological data available on the product as such.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

The product contains no PBT substances. The product contains no vPvB substances.

12.6 Endocrine disrupting properties

Endocrine disrupting properties with respect to the envrionment

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

For this subsection there is no ecotoxicological data available on the product as such.

Behaviour in sewers [waste treatment plants]

The product is an acid. Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

Disposal recommendations for packaging

Completely emptied packagings can be given for recycling.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee
14.1. UN number	1805	1805
14.2. UN proper shipping name	PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID, SOLUTION
14.3. Transport hazard class(es)	8	8
14.4. Packing group	III	III
Label		
14.5. Environmental hazards	-	-
Limited Quantity	5 l	5 l
Transport category	3	
Tunnel restriction code	E	
Hazard id. no.	80	
EmS		F-A, S-B

Information for all modes of transport

14.6. Special precautions for user

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information ***

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

Ingredients (Regulation (EC) No 648/2004)

less than 5 %: ***

non-ionic surfactants, anionic surfactants

VOC

VOC (EU) 0 %

Other information ***

The product does not contain substances according to: Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH).

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

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

Acute Tox. 4	H302	Calculation method
Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Met. Corr. 1	H290	Calculation method

Hazard statements listed in Chapter 2/3

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

CLP categories listed in Chapter 2/3

Acute Tox. 4	Acute toxicity, Category 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Eye Dam. 1	Serious eye damage, Category 1
Met. Corr. 1	Substance or mixture corrosive to metals, Category 1
Skin Corr. 1B	Skin corrosion, Category 1B
Skin Irrit. 2	Skin irritation, Category 2

Abbreviations

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route
RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses
GGVSee: Gefahrgutverordnung See
IMDG: International Maritime Code for Dangerous Goods
CAS: Chemical Abstracts Service
EAK: Europäischer Abfallkatalog
EINECS: European Inventory of Existing Commercial Chemical Substances
VOC: Volatile Organic Compound
GefStoffV: Gefahrstoffverordnung
TA Luft: Technische Anleitung zur Reinhaltung der Luft
INCI: International Nomenclature of Cosmetic Ingredients
n.a.g.: nicht anders genannt
MAK: Maximale Arbeitsplatz-Konzentration
AGW: Arbeitsplatzgrenzwert
BGW: Biologischer Grenzwert
TRGS: Technische Regeln für Gefahrstoffe
OEL: Occupational exposure limit
SUVA: Schweizerische Unfallversicherungsanstalt
WEL: Workplace exposure limit
MAC: Maximale aanvaarde concentratie (Netherlands)
MEL: Maximum exposure limits
NOEL: No observable effect level
NOEC: No observable effect concentration
LD: Lethal dose
LC: Lethal concentration
LLC: Lowest lethal concentration
PBT: Persistent, Bioaccumulative and Toxic
vPvB: Very persistent and very bioaccumulative
SVHC: Substances of very high concern

DNEL: Derived no effect level
DMEL: Derived minimal effect level
PNEC: Predicted no effect concentration
PEC: Predicted environmental concentration
GHS: Globally Harmonized System of classification and Labelling of Chemicals
REACH: Registration, Evaluation, Autohorisation and Restriction of Chemicals
UN: United Nations
EG: Europäische Gemeinschaft
EWG: Europäische Wirtschaftsgemeinschaft
EU: European Union
HSNO: Hazardous Substances and New Organisms Act (New Zealand)
ATE: Acute Toxicity Estimate
STOT: Specific Target Organ Toxicity
IOELV: Indicative Occupational Exposure Limit Values

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.