

\* Spezial 38 S Forte

Date revised: 14.11.2023

# 8750179221

Version: 12 / GB

Master No. MA-213

Print date: 17.04.2024

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

### **1.1. Product identifier**

#### **Trade name**

Spezial 38 S Forte

### **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 &amp; Co. KG

August-Hanken-Str. 30

26125 Oldenburg

Telephone no. +49 441 9317 0

Fax no. +49 441 9317 100

Information provided Department product safety / +49 441 9317 108

by / telephone

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

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.

#### **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.

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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; 2-[2-(2-butoxyethoxy)ethoxy]ethanol; 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

**2-(2-butoxyethoxy)ethanol**

CAS No.	112-34-5				
EINECS no.	203-961-6				
Registration no.	01-2119475104-44-XXXX				
Concentration	>= 1	<	10		%
Eye Irrit. 2	H319				

**2-[2-(2-butoxyethoxy)ethoxy]ethanol**

CAS No.	143-22-6				
EINECS no.	205-592-6				
Concentration	>= 1	<	3		%
Eye Dam. 1	H318				

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

Eye Dam. 1	H318	>= 30	%
Eye Irrit. 2	H319	>= 20 < 30	%

**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				

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Acute Tox. 4  
Skin Irrit. 2H302  
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.

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## **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**

#### **2-(2-butoxyethoxy)ethanol**

List	EH40			
Type	WEL			
Value	67.5	mg/m <sup>3</sup>	10	ppm(V)
Short term exposure limit	101.2	mg/m <sup>3</sup>	15	ppm(V)

#### **2-(2-butoxyethoxy)ethanol**

List	IOELV			
Type	IOELV			
Value	67,5	mg/m <sup>3</sup>	10	ppm(V)
Short term exposure limit	101,2	mg/m <sup>3</sup>	15	ppm(V)

#### **phosphoric acid ... %**

List	EH40			
Type	WEL			
Value	1	mg/m <sup>3</sup>		
Short term exposure limit	2	mg/m <sup>3</sup>		

#### **phosphoric acid ... %**

List	IOELV			
Type	IOELV			
Value	1	mg/m <sup>3</sup>		
Short term exposure limit	2	mg/m <sup>3</sup>		

### **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.

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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

<b>Physical state</b>	liquid
<b>Colour</b>	colourless
<b>Odour</b>	Product specific
<b>Melting point</b>	
Remarks	not determined
<b>Boiling point</b>	
Remarks	not determined
<b>Flammability</b>	
evaluation	not determined
<b>Explosion limits</b>	
Remarks	not determined
<b>Flash point</b>	
Value	> 100 °C
<b>Ignition temperature</b>	
Remarks	not determined
<b>Thermal decomposition</b>	
Remarks	Not relevant
<b>pH value</b>	
Value	1,5 to 2,5
Concentration/H <sub>2</sub> O	1 %
<b>Viscosity</b>	
Value	20 s
Method	DIN 53211 4 mm
<b>Solubility in other solvents</b>	not determined
<b>Octanol/water partition coefficient (log Pow)</b>	
Remarks	Not relevant
<b>Vapour pressure</b>	
Remarks	not determined
<b>Density</b>	
Value	appr. 1,29 kg/l
<b>Vapour density</b>	
Remarks	not determined
<b>Particle characteristics</b>	
Remarks	irrelevant (liquid)

### 9.2. Other information

#### Odour threshold

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Remarks  
No information available.

No data 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 alkalis.

### **10.4. Conditions to avoid**

Protect from heat and direct sunlight.

#### **Thermal decomposition**

Remarks Not relevant

### **10.5. Incompatible materials**

Reactions with alkalis. 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	1.086	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**

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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****2-(2-butoxyethoxy)ethanol**

Reference substance	2-(2-butoxyethoxy)ethanol		
Species	sun perch		
LC50	1300		mg/l
Duration of exposure	96	h	

**2-[2-(2-butoxyethoxy)ethoxy]ethanol**

Reference substance	2-[2-(2-butoxyethoxy)ethoxy]ethanol		
Species	golden orfe (Leuciscus idus)		
LC50	> 100		mg/l
Duration of exposure	96	h	
Source	Literature value		

**Amines, C12-C14-Alkyldimethyl-N-oxides**

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

**Daphnia toxicity****2-(2-butoxyethoxy)ethanol**

Reference substance	2-(2-butoxyethoxy)ethanol		
Species	Daphnia magna		
EC50	> 100		mg/l
Duration of exposure	48	h	

Species	2-(2-butoxyethoxy)ethanol		
Species	Daphnia magna		
NOEC	112		mg/l
Duration of exposure	14	d	

**2-[2-(2-butoxyethoxy)ethoxy]ethanol**

Reference substance	2-[2-(2-butoxyethoxy)ethoxy]ethanol		
Species	Daphnia magna		
EC50	> 500		mg/l
Duration of exposure	48	h	
Method	OECD 202		

**Amines, C12-C14-Alkyldimethyl-N-oxides**

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

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### Algae toxicity

#### 2-(2-butoxyethoxy)ethanol

Reference substance	2-(2-butoxyethoxy)ethanol		
Species	Desmodesmus subspicatus		
ErC50	>	100	mg/l
Duration of exposure	72	h	
Method	OECD 201		

#### 2-[2-(2-butoxyethoxy)ethoxy]ethanol

Reference substance	2-[2-(2-butoxyethoxy)ethoxy]ethanol		
Species	Pseudokirchneriella subcapitata		
EC50	>	100	mg/l
Duration of exposure	72	h	
Method	OECD 201		

#### Amines, C12-C14-Alkyldimethyl-N-oxides

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

### Bacteria toxicity

#### 2-(2-butoxyethoxy)ethanol

Reference substance	2-(2-butoxyethoxy)ethanol		
Species	activated sludge		
EC10	>	1995	mg/l
Duration of exposure	30	min	
Source	Literature value		

#### 2-[2-(2-butoxyethoxy)ethoxy]ethanol

Reference substance	2-[2-(2-butoxyethoxy)ethoxy]ethanol		
Species	activated sludge		
EC10	>	1995	mg/l
Duration of exposure	30	min	
Method	OECD 209		

## 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

#### 2-(2-butoxyethoxy)ethanol

Reference substance	2-(2-butoxyethoxy)ethanol		
Value	89	to	93 %
Duration of test evaluation	28	d	
Method	readily degradable OECD 301 C		

#### 2-[2-(2-butoxyethoxy)ethoxy]ethanol

Reference substance	2-[2-(2-butoxyethoxy)ethoxy]ethanol		
Value	>	60	%
Duration of test evaluation	17	d	
Method	Readily biodegradable (according to OECD criteria)		

#### 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
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#### **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 environment**

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**

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	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.

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## 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

### 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.
H319	Causes serious eye irritation.
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
Eye Irrit. 2	Eye irritation, Category 2
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

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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.