

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**schülke** 

**mucaso!®**      **No Change Service!**

Version  
04.00

Revision Date:  
27.07.2016

Date of last issue: 30.06.2015  
Date of first issue: 30.01.2014

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

### 1.1 Product identifier

Trade name : mucaso!®

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

Use of the Sub-  
stance/Mixture : Cleaning agent

Recommended restrictions  
on use : Restricted to professional users.

### 1.3 Details of the supplier of the safety data sheet

Manufacturer/ Supplier : Schülke & Mayr GmbH  
Robert-Koch-Str. 2  
  
22851 Norderstedt  
Germany  
Telephone: +49 (0)40/ 52100-0  
Telefax: +49 (0)40/ 52100318  
mail@schuelke.com  
www.schuelke.com

E-mail address of person  
responsible for the  
SDS/Contact person : Application Department HI  
+49 (0)40/ 521 00 8800  
ADHI@schuelke.com  
(Schülke & Mayr UK Ltd.: +44-1142543500)

### 1.4 Emergency telephone number

Emergency telephone num-  
ber : UK Poisons Emergency number: 0870 600 6266  
Emergency telephone num-  
ber : +49 (0)40 / 52 100 -0

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Corrosive to metals, Category 1	H290: May be corrosive to metals.
Skin irritation, Category 2	H315: Causes skin irritation.
Serious eye damage, Category 1	H318: Causes serious eye damage.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H290 May be corrosive to metals.

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Precautionary statements	H315	Causes skin irritation.
	H318	Causes serious eye damage.
:	P280	Wear protective gloves/ eye protection.
	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	P305+P351+P338+P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
Special labelling of certain mixtures	:	Labelling according to Regulation (EC) No. 648/2004: (>30% Phosphates, < 5 % anionic surfactants, < 5 % amphoteric surfactants, < 5 % EDTA and salts thereof)

## 2.3 Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). No special risks known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : Solution of the following substances with harmless additives.

#### Hazardous components

Chemical name	Index-Number CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
Potassium Phosphate Tribasic Trihydrate	- - - 22763-03-7 - - -	Skin Irrit. 2; H315 Eye Irrit. 2; H319	<= 25
Tetrapotassium pyrophosphate	- - - 7320-34-5 230-785-7 01-2119489369-18-XXXX	Eye Irrit. 2; H319	<= 10
Orthophosphoric acid	- - - 7664-38-2 231-633-2 01-2119485924-24-XXXX	Skin Corr. 1B; H314 Met. Corr. 1; H290	<= 3

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice : Take off all contaminated clothing immediately.  
If inhaled : Move to fresh air. If symptoms persist, call a physician.  
In case of skin contact : Wash off immediately with plenty of water. Consult a doctor if

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- In case of eye contact      : skin irritation persists.  
   : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If eye irritation persists, consult a specialist.
- If swallowed                        : Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

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

- Symptoms                                : irritant effects,

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

- Treatment                                : For specialist advice physicians should contact the Poisons Information Service. Treat symptomatically. Treat symptomatically.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

- Suitable extinguishing media      : Carbon dioxide (CO<sub>2</sub>), Foam, Dry powder, Water spray jet
- Unsuitable extinguishing media    : High volume water jet

**5.2 Special hazards arising from the substance or mixture**

- Specific hazards during fire-fighting    : No information available.
- Specific risk from the substance or the product itself, its combustion products or evolved gases    : Fire may cause evolution of: Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>)

**5.3 Advice for firefighters**

- Special protective equipment for firefighters    : In the event of fire, wear self-contained breathing apparatus.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

- Personal precautions                        : Increased risk of slipping in the presence of leaked / spilled product. Use personal protective equipment.

**6.2 Environmental precautions**

- Environmental precautions                : Avoid subsoil penetration.

**6.3 Methods and material for containment and cleaning up**

- Methods for cleaning up                        : Wipe up with absorbent material (e.g. cloth, fleece).  
   : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

**6.4 Reference to other sections**

see Section 8 + 13

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Advice on safe handling : Avoid contact with skin and eyes.  
Advice on protection against fire and explosion : No special protective measures against fire required.  
Hygiene measures : Keep away from food and drink.

### 7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Store at room temperature in the original container. Do not store at temperatures above 30°C.  
Further information on storage conditions : Keep away from heat. Keep away from direct sunlight. Keep container tightly closed.  
Advice on common storage : No materials to be especially mentioned.

### 7.3 Specific end use(s)

- Specific use(s) : none

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Orthophosphoric acid	7664-38-2	Permissible exposure limit	1 mg/m <sup>3</sup>	EC/2000/39
		Short term exposure limit	2 mg/m <sup>3</sup>	EC/2000/39

### 8.2 Exposure controls

#### Personal protective equipment

- Eye protection : Tightly fitting safety goggles
- Hand protection  
Directive : The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
- Remarks : Splash protection: disposable nitrile rubber gloves e.g. Dermatril (layer thickness: 0.11 mm) made by KCL or gloves from other manufacturers offering the same protection. Prolonged contact: Nitrile rubber gloves e.g. Camatril (>480 Min., layer thickness: 0,40 mm) or butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0,70 mm) made by KCL or gloves from other manufacturers offering the same protection.
- Protective measures : Avoid contact with skin and eyes.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

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Appearance	: liquid
Colour	: green
Odour	: characteristic
Odour Threshold	: not determined
pH	: 12,0 - 12,5, 20 °C, concentrate
Melting point/freezing point	: < 0 °C
Decomposition temperature	: No data available
Boiling point/boiling range	: > 100 °C
Flash point	: Not applicable
Evaporation rate	: Not applicable
Flammability (solid, gas)	: Not applicable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: Not applicable
Relative vapour density	: Not applicable
Density	: 1,40 g/cm <sup>3</sup> , 20 °C
Solubility(ies)	
Water solubility	: completely miscible , 20 °C
Auto-ignition temperature	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

## 9.2 Other information

|| Corrosive in contact with metals : > 6,25 mm/a, Corrosive to metals, Aluminium, Mild steel

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

The product is chemically stable.

### 10.3 Possibility of hazardous reactions

reaction with acids

### 10.4 Conditions to avoid

Protect from frost, heat and sunlight.

### 10.5 Incompatible materials

Possible incompatibility with alkali sensitive materials.,

### 10.6 Hazardous decomposition products

None reasonably foreseeable.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

#### Product:

Acute oral toxicity : Acute toxicity estimate: > 10.000 mg/kg

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Acute inhalation toxicity : Acute toxicity estimate: > 50 mg/l  
Acute dermal toxicity : Acute toxicity estimate: > 15.000 mg/kg

## **Skin corrosion/irritation**

### **Product:**

Causes skin irritation., Calculation method

## **Serious eye damage/eye irritation**

### **Product:**

Causes serious eye damage., Calculation method

## **Respiratory or skin sensitisation**

### **Components:**

#### **Potassium Phosphate Tribasic Trihydrate:**

No data available

#### **Tetrapotassium pyrophosphate:**

According to experience not expected

#### **Orthophosphoric acid:**

Does not cause skin sensitisation.largely based on human evidence

## **Germ cell mutagenicity**

### **Components:**

#### **Potassium Phosphate Tribasic Trihydrate:**

Genotoxicity in vitro : No data available

#### **Tetrapotassium pyrophosphate:**

Germ cell mutagenicity- Assessment : No data available

#### **Orthophosphoric acid:**

Germ cell mutagenicity- Assessment : No data available

## **Carcinogenicity**

### **Components:**

#### **Potassium Phosphate Tribasic Trihydrate:**

This information is not available.

#### **Tetrapotassium pyrophosphate:**

Carcinogenicity - Assessment : No data available

#### **Orthophosphoric acid:**

Carcinogenicity - Assessment : No data available

## **Reproductive toxicity**

### **Components:**

#### **Potassium Phosphate Tribasic Trihydrate:**

Effects on fertility : This information is not available.

Effects on foetal development : This information is not available.

#### **Tetrapotassium pyrophosphate:**

Reproductive toxicity - Assessment : No data available

#### **Orthophosphoric acid:**

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Rat, Oral, NOAEL: F1:  $\geq$  500 mg/kg

Reproductive toxicity - Assessment : No data available

#### STOT - single exposure

No data available

#### STOT - repeated exposure

No data available

#### Aspiration toxicity

No data available

#### Further information

#### Product:

There is no data available for this product.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

##### **Potassium Phosphate Tribasic Trihydrate:**

Toxicity to fish : LC0 (Leuciscus idus (Golden orfe)): ca. 900 mg/l, 48 h, OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : No data available

Toxicity to algae : No data available

##### **Tetrapotassium pyrophosphate:**

Toxicity to fish : LC0 (Leuciscus idus (Golden orfe)): 750 mg/l, 48 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l, 48 h

Toxicity to algae : EC50 : > 100 mg/l, 72 h

##### **Orthophosphoric acid:**

Toxicity to fish : LC50 (Gambusia affinis (Mosquito fish)): 138 mg/l, 96 h

Toxicity to daphnia and other aquatic invertebrates : No data available

Toxicity to algae : No data available

### 12.2 Persistence and degradability

#### Components:

##### **Potassium Phosphate Tribasic Trihydrate:**

Biodegradability : No data available

##### **Tetrapotassium pyrophosphate:**

Biodegradability : inorganic

##### **Orthophosphoric acid:**

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

### 12.3 Bioaccumulative potential

#### Components:

##### **Potassium Phosphate Tribasic Trihydrate:**

Bioaccumulation : No data available

##### **Tetrapotassium pyrophosphate:**

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Bioaccumulation : No data available

**Orthophosphoric acid:**

Bioaccumulation : No data available

## 12.4 Mobility in soil

**Components:**

**Potassium Phosphate Tribasic Trihydrate:**

Mobility : No data available

**Tetrapotassium pyrophosphate:**

Mobility : No data available

**Orthophosphoric acid:**

Mobility : No data available

## 12.5 Results of PBT and vPvB assessment

**Product:**

Assessment : This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

## 12.6 Other adverse effects

**Product:**

Additional ecological information : none

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

- Product : Dispose of the product according to the defined EWC (European Waste Code) No.
- Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
- Waste key for the unused product : European waste catalog (EWC) 070601
- Waste key for the unused product(Group) : Waste material of HZVA from fats, lubricants, soaps, detergents, disinfectants and personal protection products.

## SECTION 14: Transport information

### 14.1 UN number

ADR : UN 1719

IMDG : UN 1719

IATA : UN 1719

### 14.2 UN proper shipping name

ADR : CAUSTIC ALKALI LIQUID, N.O.S.  
(Potassium Phosphate Tribasic Trihydrate)

IMDG : CAUSTIC ALKALI LIQUID, N.O.S.  
(Potassium Phosphate Tribasic Trihydrate)

IATA : Caustic alkali liquid, n.o.s.  
(Potassium Phosphate Tribasic Trihydrate)



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## 14.3 Transport hazard class(es)

<b>ADR</b>	: 8
<b>IMDG</b>	: 8
<b>IATA</b>	: 8

## 14.4 Packing group

<b>ADR</b>	
Packing group	: III
Classification Code	: C5
Hazard Identification Number	: 80
Labels	: 8
Tunnel restriction code	: E
<b>IMDG</b>	
Packing group	: III
Labels	: 8
EmS Code	: F-A, S-B

<b>IATA</b>	
Packing instruction (cargo aircraft)	: 856
Packing group	: III
Labels	: Corrosive

## 14.5 Environmental hazards

<b>ADR</b>	
Environmentally hazardous	: no

<b>IMDG</b>	
Marine pollutant	: no

## 14.6 Special precautions for user

For personal protection see section 8.

## 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

<b>REACH</b> - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: Not applicable
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Regulation (EC) No 850/2004 on persistent organic pollutants	: Not applicable
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Legislation on the control of major-accident hazards involving dangerous substances	: Directive 96/82/EC does not apply
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Volatile organic compounds	: none, Directive 2010/75/EC on the limitation of emissions of volatile organic compounds
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Other regulations : The surfactant(s) contained in this mixture 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. Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work. Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values.

## 15.2 Chemical safety assessment

Exempt

## SECTION 16: Other information

### Full text of H-Statements

H290 : May be corrosive to metals.  
H314 : Causes severe skin burns and eye damage.  
H315 : Causes skin irritation.  
H319 : Causes serious eye irritation.

### Full text of other abbreviations

Eye Irrit. : Eye irritation  
Met. Corr. : Corrosive to metals  
Skin Corr. : Skin corrosion  
Skin Irrit. : Skin irritation

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; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation,

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tion, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### **Further information**

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No. 1272/2008

Met. Corr. 1, H290                   : On basis of test data.  
Skin Irrit. 2, H315                 : Calculation method  
Eye Dam. 1, H318                 : Calculation method

|| Changes compared with the previous edition!!!

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.