

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name: WMF Special Scale Remover

UFI: 1Q00-709H-000P-4GW8

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

General use: For the removal of boiler scale

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

Company name: IBEDA-CHEMIE Klaus P. Christ GmbH

Street/POB-No.: Am Eichelgärtchen 32

Postal Code, city: DE-56283 Halsenbach

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Telephone: +49 (0)6747-9501-0

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Department responsible for information:

Herr Christ, Telephone: +49 (0)6747-95010 (Only available during office hours.)

**1.4 Emergency telephone number****GIZ-Nord, Göttingen, Germany,****Telephone: +49 551-19240****SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to EC regulation 1272/2008 (CLP)**

Skin Irrit. 2; H315 Causes skin irritation.

Eye Irrit. 2; H319 Causes serious eye irritation.

Aquatic Chronic 3; H412 Harmful to aquatic life with long lasting effects.

**2.2 Label elements****Labelling (CLP)**

Signal word:

**Warning**

Hazard statements:

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H412

Harmful to aquatic life with long lasting effects.

Precautionary statements:

P102

Keep out of reach of children.

P273

Avoid release to the environment.

P280

Wear protective gloves/protective clothing/eye protection.

P302+P352

IF ON SKIN: Wash with plenty of water/soap.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313

If skin irritation occurs: Get medical advice/attention.

P337+P313

If eye irritation persists: Get medical advice/attention.

P501

Dispose of contents/container to hazardous or special waste collection point.

**Special labelling**

Text for labelling: Contains Sulphamidic acid

**2.3 Other hazards**

No risks worthy of mention.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

No data available

**SECTION 3: Composition/information on ingredients**

3.1 Substances: not applicable

**3.2 Mixtures**

Hazardous ingredients:

Identifiers	Designation Classification	Content
REACH 01-2119488633-28-xxxx EC No. 226-218-8 CAS 5329-14-6	Sulphamidic acid Skin Irrit. 2; H315. Eye Irrit. 2; H319. Aquatic Chronic 3; H412.	>= 80 %

Full text of H- and EUH-statements: see section 16.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

In case of inhalation: Move victim to fresh air, put at rest and loosen restrictive clothing.  
In case of respiratory difficulties seek medical attention. If breathing becomes irregular or ceases, apply rescue breathing or artificial respiration immediately, where required supply oxygen. If victim is at risk of losing consciousness, position and transport on their side.

Following skin contact: After contact with skin, wash immediately with soap and plenty of water.  
Change contaminated clothing. In case of skin irritation, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart.  
Remove contact lenses. Subsequently consult an ophthalmologist.

After swallowing: Never give anything by mouth to an unconscious person. Drink large quantities of water. Do not induce vomiting. Seek medical attention.

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

In case of inhalation: Cough, shortage of breath.  
In case of ingestion:  
Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.  
After contact with skin: irritation  
After eye contact: Strongly irritant up to corrosive

**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: Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

Extinguishing media which must not be used for safety reasons:

Full water jet

## 5.2 Special hazards arising from the substance or mixture

Hazardous vapours may form during fires.

In case of fire may be liberated: sulphur oxides, nitrogen oxides (NO<sub>x</sub>), ammonia.

## 5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Hazchem-Code: 2X

Cool endangered containers with water spray and, if possible, remove from danger zone. Use water spray jet to knock down vapours. Do not breathe fumes.

Do not allow fire water to penetrate into surface or ground water. Fire water becomes acidic.

# SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Wear appropriate protective equipment. Avoid contact with the substance. Avoid generation of dust. Do not breathe dust.

## 6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

If necessary notify appropriate authorities.

## 6.3 Methods and material for containment and cleaning up

Avoid generation of dust. Collect dry and place in appropriate containers for disposal.

Subsequent cleaning.

Final cleaning: Use soda or another alkaline detergent for removal of residues.

## 6.4 Reference to other sections

Refer additionally to section 8 and 13.

# SECTION 7: Handling and storage

## 7.1 Precautions for safe handling

Advices on safe handling:

Provide adequate ventilation, and local exhaust as needed.

Avoid contact with skin, eyes, and clothing.

Avoid generation of dust. Do not breathe dust. Wear appropriate protective equipment.

When using do not eat, drink or smoke.

When diluting, always add the product to water. Never add water to the product.

Precautions against fire and explosion:

Usual measures for fire prevention.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep only in the original container. Keep container tightly closed and dry.

storage temperature: No special measures are required.

Hints on joint storage:

Not let come into contact with light metals.

Keep away from food, drink and animal feedingstuffs.

## 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Occupational exposure limit values:

Type	Limit value
Great Britain: WEL-TWA	10 mg/m <sup>3</sup> (Dust limit value, inhalable fraction)
Great Britain: WEL-TWA	4 mg/m <sup>3</sup> (Dust limit value, respirable fraction)
Ireland: 8 hours	10 mg/m <sup>3</sup> (Dust limit value, inhalable fraction)
Ireland: 8 hours	4 mg/m <sup>3</sup> (Dust limit value, respirable fraction)

### 8.2 Exposure controls

Provide good ventilation. Dust should be exhausted directly at the point of origin.

### Personal protection equipment

#### Occupational exposure controls

- Respiratory protection: With the formation of dust, use a dust mask.  
Use filter apparatus type B-P2.
- Hand protection: Protective gloves according to EN 374.  
Glove material: Nitrile rubber (0.11 mm).  
Breakthrough time: >480 min.  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
- Eye protection: Tightly sealed goggles according to EN 166.
- Body protection: Wear suitable protective clothing.
- General protection and hygiene measures:  
Avoid contact with skin, eyes, and clothing. Change contaminated clothing.  
Do not breathe dust. Wear appropriate protective equipment.  
Have eye wash bottle or eye rinse ready at work place.  
When using do not eat or drink.  
Wash hands before breaks and after work.

#### Environmental exposure controls

Refer to "6.2 Environmental precautions".

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance:	Form: solid, Powder Colour: white
Odour:	odourless
Odour threshold:	No data available
pH:	at 20 °C, 10 g/L: 1.0
Melting point/freezing point:	205 °C
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	No data available
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapour pressure:	at 20 °C: 0.0078 hPa at 100 °C: 0.025 hPa
Vapour density:	No data available
Density:	at 25 °C: 2.06 g/cm <sup>3</sup>

Water solubility:	at 20 °C: 213 g/L at 80 °C: 470 g/L
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	209 °C
Viscosity, kinematic:	No data available
Explosive properties:	No data available
Oxidizing characteristics:	No data available

## 9.2 Other information

Bulk density:	800 - 1200 kg/m <sup>3</sup>
Additional information:	Molar mass: 97.09 g/mol

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

In aqueous solution: May be corrosive to metals.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

At high temperatures, will react with alkali nitrites and nitrates as well as with other metal nitrates in explosive fashion and develop nitrogen.

The product develops hydrogen in an aqueous solution in contact with metals.

Reacts with alkalis with development of heat.

### 10.4 Conditions to avoid

Keep away from heat. Avoid generation of dust.

### 10.5 Incompatible materials

halogens, bases, oxidizing agents (nitrates, nitrites, nitric acid), metals with water.

### 10.6 Hazardous decomposition products

In case of strong heating: sulphur oxides, nitrogen oxides (NO<sub>x</sub>), ammonia

Thermal decomposition: 209 °C

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity:	LD50 Rat, oral: Sulphamidic acid > 2000 mg/kg
	LD0 Rat, oral: Sulphamidic acid 100 mg/kg
	LD50 Rat, dermal: Sulphamidic acid > 2000

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Skin Irrit. 2; H315 = Causes skin irritation.

Serious eye damage/irritation: Eye Irrit. 2; H319 = Causes serious eye irritation.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Based on available data, the classification criteria are not met.  
Not known to cause sensitization.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

## Symptoms

In case of inhalation: Cough, shortage of breath.

In case of ingestion:  
Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

After contact with skin: irritation

After eye contact: Strongly irritant up to corrosive

## SECTION 12: Ecological information

### 12.1 Toxicity

Aquatic toxicity: Harmful to aquatic life with long lasting effects. Harmful effects on water organisms by modification of pH-value.

### 12.2 Persistence and degradability

Further details: No data available

Effects in sewage plants: Before discharge into sewage plants the product normally needs to be neutralised.

### 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:  
No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

No data available

### 12.6 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Waste key number: 20 01 14\* = Acids  
\* = Evidence for disposal must be provided.  
Recommendation: Dispose of waste according to applicable legislation.

**Package**

Waste key number: 15 01 02 = Plastic packaging  
Recommendation: Dispose of waste according to applicable legislation.

**SECTION 14: Transport information****14.1 UN number**

ADR/RID, IMDG, IATA-DGR: UN 2967

**14.2 UN proper shipping name**

ADR/RID, IMDG, IATA-DGR: UN 2967, SULPHAMIC ACID

**14.3 Transport hazard class(es)**

ADR/RID: Class 8, Code: C2  
IMDG: Class 8, Subrisk -  
IATA-DGR: Class 8

**14.4 Packing group**

ADR/RID: III

**14.5 Environmental hazards**

Marine pollutant: no

**14.6 Special precautions for user****Land transport (ADR/RID)**

Warning board: ADR/RID: Kemmler-number 80, UN number UN 2967  
Hazard label: 8  
Limited quantities: 5 kg  
EQ: E1  
Package - Instructions: P002 IBC08 LP02 R001  
Package - Special Provisions: B3  
Special provisions for packing together: MP10  
Portable tanks - Instructions: T1  
Portable tanks - Special Provisions: TP33  
Tank coding: SGAV  
Tunnel restriction code: E

**Sea transport (IMDG)**

EmS:	F-A, S-B
Special Provisions:	-
Limited quantities:	5 kg
Excepted quantities:	E1
Package - Instructions:	P002, LP02
Package - Provisions:	-
IBC - Instructions:	IBC08
IBC - Provisions:	B3
Tank instructions - IMO:	-
Tank instructions - UN:	T1
Tank instructions - Provisions:	TP33
Stowage and handling:	Category A.
Segregation:	SG36 SG49
Properties and observations:	White crystalline powder. Soluble in water. Decomposes when heated, evolving toxic fumes. Causes burns to skin, eyes and mucous membranes.
Segregation group:	1

**Air transport (IATA)**

Hazard label:	Corrosive
Excepted Quantity Code:	E1
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y845 - Max. Net Qty/Pkg. 5 kg
Passenger and Cargo Aircraft:	Pack.Instr. 860 - Max. Net Qty/Pkg. 25 kg
Cargo Aircraft only:	Pack.Instr. 864 - Max. Net Qty/Pkg. 100 kg
Special Provisions:	A803
Emergency Response Guide-Code (ERG):	8L

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

No data available

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations - Great Britain**

Hazchem-Code: 2X  
No data available

**National regulations - EC member states****Labelling of packaging with <= 125mL content**

Signal word: **Warning**

Hazard statements: H412 Harmful to aquatic life with long lasting effects.

Precautionary statements: P102 Keep out of reach of children.

Further regulations, limitations and legal requirements:  
No data available

**15.2 Chemical Safety Assessment**

For this mixture a chemical safety assessment is not required.

**SECTION 16: Other information****Further information**

Wording of the H-phrases under paragraph 2 and 3:

H315 = Causes skin irritation.

H319 = Causes serious eye irritation.

H412 = Harmful to aquatic life with long lasting effects.

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

Aquatic Chronic: Hazardous to the aquatic environment - chronic

AS/NZS: Australian Standards/New Zealand Standards

CAS: Chemical Abstracts Service

CFR: Code of Federal Regulations

CLP: Classification, Labelling and Packaging

DMEL: Derived minimal effect level

DNEL: Derived no-effect level

EC: European Community

EN: European Standard

EQ: Excepted quantities

Eye Irrit.: Eye irritation

IATA: International Air Transport Association

IATA-DGR: International Air Transport Association – Dangerous Goods Regulations

IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

IMDG Code: International Maritime Dangerous Goods Code

LD50: Lethal dose 50%

MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

OSHA: Occupational Safety and Health Administration

PBT: Persistent, bioaccumulative and toxic

PNEC: Predicted no-effect concentration

RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail

Skin Irrit.: Skin irritation

TRGS: Technical Rules for Hazardous Substances

UN: United Nations

vPvB: Very persistent and very bioaccumulative

Reason of change:

General revision

Date of first version:

11/5/2003

**Department issuing data sheet**

Contact person:

see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.

Most recent product information is available at  
<http://sumdat.net/8tapfw55>

