

## 1. Identification of the substance/preparation and of the company/undertaking

### Identification of the substance or preparation

Name of product: WMF Special Scale Remover

### Use of the substance/preparation

for scaling

### Company/undertaking identification

Company name: IBEDA-CHEMIE Klaus P. Christ GmbH

Street/POB-No.: Am Eichelgärtchen 32

State/city/postal code: D-56283 Halsenbach

Email: info@ibeda-chemie.com

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

Telefax: +49 (0)6747-9501-11

Dept. responsible for information:

Herr Dohmann, Telephone: +49 (0)6747-9501-16

### Emergency telephone

Beratungsstelle bei Vergiftung, Telephone: +49 (0)6131-19240

## 2. Hazards identification

### Classification according to directive 67/548/EEC or 1999/45/EC:



Xi

irritant

R 36/38

Irritating to eyes and skin.

R 52/53

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 3. Composition/information on ingredients

Dangerous ingredients:

CAS-No.	EINECS / ELINCS	Chemical name	Content	classification
5329-14-6	226-218-8	Sulphamidic acid	>= 80 %	Xi; R 36/38, 52/53

## 4. First aid measures

Following 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 mouth-to-mouth breathing or artificial ventilation immediately, where required administer oxygen. If victim is at risk of losing consciousness, position and transport on their side.

After 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:

Drink large quantities of water. Do not induce vomiting. Seek medical attention.

Information to physician: Treat symptomatically.  
Rinse mouth with water. Product reacts acidic.

## 5. Fire fighting measures

Suitable extinguishing media:

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

Special exposure hazards arising from the preparation itself, combustion products, resulting gases:

Hazardous vapours may form during fires.

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

Special protective equipment for fire-fighters:

Wear a self-contained breathing apparatus and chemical resistant suit.

Additional information:

Use water spray jet to knock down vapours.

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

## 6. Accidental release measures

Personal precautions:

Provide adequate ventilation. Wear personal protection equipment.

Avoid generation of dust. Do not breathe dust. Avoid contact with the substance.

Environmental precautions:

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

If necessary notify appropriate authorities.

Methods for cleaning up:

Collect dry and place in appropriate containers for disposal, cleaning.

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

## 7. Handling and storage

### Handling

Information for safe handling:

Handle in accordance with good industrial hygiene and safety practice.

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

Do not breathe dust. Avoid contact with skin and eyes.

### Storage

Requirements for storerooms and containers:

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

storage temperature: No special measures are required.

Information about storage in one common storage facility:

Not let come into contact with light metals.

Storage class:

8B= Non-combustible corrosive substances

## 8. Exposure controls / Personal protection equipment

### Exposure limit values

Additional information:

Please observe generally defined limit for dust:

TWA Great Britain: 10 mg/m<sup>3</sup> (inhalable dust)

TWA Great Britain: 4 mg/m<sup>3</sup> (respirable dust)

### Exposure controls

Dust should be vacuumed up immediately at the place it occurs.

See also information in chapter 7, section storage.

### Occupational exposure controls

Respiratory protection:

With the formation of dust, use a dust mask. Use filter apparatus type B-P2. (according to EN 141)

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Hand protection: Chemically resistant gloves according to EN 374.  
Glove material: Nitrile rubber-Breakthrough time: >480 min.  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed safety glasses according to EN 166.

Skin protection: Light protective clothing

General protection and hygiene measures:  
Avoid contact with skin and eyes.  
When using do not eat or drink. Change contaminated clothing.  
Wash hands before breaks and after work.  
Have eye wash bottle or eye rinse ready at work place.

## 9. Physical and chemical properties

### Appearance

Physical state: solid, Powder  
Colour: white  
Odour: odourless

### Important health, safety and environmental information

Melting point / melting range: 205 °C  
Vapour pressure: at 20 °C: 0,0078 hPa  
at 100 °C: 0,025 hPa  
Density: at 25 °C: 2,06 g/cm<sup>3</sup>  
Package density: 800-1200 kg/m<sup>3</sup>  
pH value: at 20 °C, 10 g/L: 1,0  
Solubility in water: at 20 °C: 213 g/l  
at 80 °C: 470 g/l  
Thermal decomposition: 209°C

### Additional information

Molecular weight: 97,09 g/mol

## 10. Stability and reactivity

Conditions to avoid: Keep away from heat.  
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.

Materials to avoid: halogens, bases, oxidizing agents (nitrates, nitrites, nitric acid), metals with water.

Hazardous decomposition products:  
In case of strong heating: sulfur oxides, nitrogen oxides (NO<sub>x</sub>), ammonia

Thermal decomposition: 209°C

## 11. Toxicological information

### Toxicological Tests:

Acute toxicity: LD50 Rat, oral: 3160 mg/kg  
LD0 Rat, oral: 100 mg/kg

Following inhalation: Irritating to respiratory system. Cough, shortage of breath.

After swallowing: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

After skin contact: irritant

After eye contact: strongly irritant up to corrosive

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**General remarks**

Not known to cause sensitization.

**12. Ecological information****Ecotoxicity**

Aquaticity: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful effects on water organisms by modification of pH-value.

Water Hazard Class: 1 = slightly hazardous to water

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

**Additional ecological information**

General information: Do not allow to enter ground water, sewage or drains.

**13. Disposal considerations****Product**

Waste key number 200114\* = Acids

\* = Evidence for disposal must be provided.

Recommendation: Dispose of waste according to applicable legislation.

**Contaminated packaging**

Recommendation: Non-contaminated packages may be recycled. Single packs can be disposed of together with household waste.

Large amounts:

Waste key number EU: 150110 = Packings containing harmful residue.

**14. Transport information****Overland transport (ADR/RID)**

Warning board: ADR/RID: Kemmler-number 80, UN number 2967

Product designation: UN 2967, SULPHAMIC ACID

ADR/RID: Class 8, Code: C2

Packaging group: III

Label: 8

Limited quantities: LQ24

EQ: E1

Contaminated packaging: Instructions P002 IBC08 LP02 R001

Contaminated packaging: 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



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**Transport by sea (IMDG)**

UN number: 2967  
Proper shipping name: SULPHAMIC ACID  
IMDG: Class 8, Code -  
Packing Group: III  
EmS: F-A, S-B  
Special provisions: -  
Limited quantities: 5 kg  
EQ: E1  
Contaminated packaging: Instructions P002, LP02  
Contaminated packaging: Provisions: -  
IBC: Instructions IBC08  
IBC: Provisions B3  
Tank instructions: IMO: -  
Tank instructions: UN: T1  
Tank instructions Provisions: TP33  
Stowage and segregation: Category A.  
Properties and observations: White crystalline powder. Soluble in water. Decomposes when heated, evolving toxic fumes. Causes burns to skin, eyes and mucous membranes.  
Marine Pollutant: No

**Air transport (IATA)**

UN/ID number: 2967  
Proper shipping name: SULPHAMIC ACID  
ICAO/IATA: Class 8  
Hazard: Corrosive  
PG: III  
EQ: E1  
Passenger Ltd.Qty.: Y822 - Maximum quantity: 5 kg  
Passenger: 822 - Maximum quantity: 25 kg  
Cargo: 823 - Maximum quantity: 100 kg  
ERG: 8L

**15. Regulatory information****Labelling (67/548/EEC or 1999/45/EC)**

Code letter and hazard symbol: Xi irritant

R phrase(s): R 36/38 Irritating to eyes and skin.  
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S phrase(s): S 2 Keep out of the reach of children.  
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S 28 After contact with skin, wash immediately with soap and plenty of water.  
S 61 Avoid release to the environment. Refer to special instructions / safety data sheet.

Text for labelling contains Amidosulfonic acid

**National regulations****National regulations - Great Britain**

Hazchem-Code: 2X

**National regulations - Germany**

Storage class: 8B= Non-combustible corrosive substances

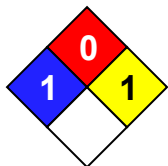
Water Hazard Class: 1 = slightly hazardous to water

Informations on working limitations:

Observe employment restrictions concerning young persons.

**National regulations - USA**

Hazard rating systems



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 0 (Minimal)

Reactivity: 1 (Slight)

HMIS Version III Rating:

Health: 1 (Slight)

Flammability: 0 (Minimal)

Physical Hazard: 1 (Slight)

Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	1
	X

**16. Other information****Further remarks**

R phrase(s):

R 36/38 = Irritating to eyes and skin.

R 52/53 = Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Reason of change:

Changes in section 14: ADN 2009, IMDG 2009

**Group that issues data sheet**

Contact person:

see chapter 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.