

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

1.1 Product identifier

Trade name: Descaling Tablets

UFI: R000-50SA-J00Q-US7R

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

E-mail: info@ibeda-chemie.com

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

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

Department responsible for information:

Herr Dohmann, Telephone: +49 (0)6747-9501-16 (Only available during office hours.)

Additional information:

Source of supply, other:

BSH Home Appliances Ltd.

Customer Service

Grand Union House

Old Wolverton Road

Wolverton

Milton Keynes MK12 5PT

E-mail: mks-spares@bshg.com

Telephone: 0344 892 8921

Calls are charged at the basic rate, please check with your telephone service provider for exact charges.

1.4 Emergency telephone number

Poisons Information Centre of Ireland

Telephone: 01 809 2566

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.

Skin Sens. 1; H317 May cause an allergic skin reaction.

STOT SE 3; H335 May cause respiratory irritation.

2.2 Label elements

Labelling (CLP)



Signal word:

Warning

Hazard statements:	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H319	Causes serious eye irritation.
	H335	May cause respiratory irritation.
Precautionary statements:	P102	Keep out of reach of children.
	P264	Wash hands thoroughly after handling.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P312	Call a POISON CENTER/doctor if you feel unwell.
	P405	Store locked up.
	P501	Dispose of contents to hazardous or special waste collection point.

Special labelling

Text for labelling: Contains Sulphamidic acid, Maleic acid and Citric acid, anhydrous.

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

Chemical characterisation: Mixture of the substances listed below with non-hazardous additions:

Hazardous ingredients:

Identifiers	Designation Classification	Content
REACH 01-2119457026-42-xxxx EC No. 201-069-1 CAS 77-92-9	Citric acid, anhydrous Eye Irrit. 2; H319. STOT SE 3; H335.	45 - 55 %
EC No. 203-742-5 CAS 110-16-7	Maleic acid Acute Tox. 4; H302. Acute Tox. 4; H312. Skin Irrit. 2; H315. Eye Irrit. 2; H319. Skin Sens. 1; H317. STOT SE 3; H335. Specific concentration limits (SCL): Skin Sens. 1; H317: C ≥ 0.1 %	15 - 25 %
EC No. 226-218-8 CAS 5329-14-6	Sulphamidic acid Skin Irrit. 2; H315. Eye Irrit. 2; H319. Aquatic Chronic 3; H412.	10 - 20 %

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

Additional information: Contains Sodium hydrogencarbonate: The maximum workplace exposure limits are, where necessary, listed in section 8.

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

General information:	If medical advice is needed, have product container or label at hand. Take off contaminated clothing and wash it before reuse.
In case of inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if problems persist.

Following skin contact:	Immediately clean with water and soap followed by thorough rinsing. In case of skin reactions, 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, if present and easy to do. Continue rinsing. Subsequently consult an ophthalmologist.
After swallowing:	Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May cause an allergic skin reaction. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Other symptoms: Cough, shortage of breath. Pulmonary edema is possible. Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Abdominal pain, vomiting, burns.

Symptoms may occur with delay.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Rinse mouth with water. Product reacts acidic.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray jet, alcohol resistant foam, extinguishing powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

5.2 Special hazards arising from the substance or mixture

May form dangerous gases and vapours in case of fire.

Furthermore, there may develop: Nitrogen oxides (NO_x), sulphur oxides, carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

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

Additional information:

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. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

If possible, eliminate leakage. Provide adequate ventilation.

Wear appropriate protective equipment. Keep unprotected people away.

Take off contaminated clothing and wash it before reuse.

6.2 Environmental precautions

Do not allow to enter into ground-water, surface water 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.

To clean the floor and all object contaminated by this material, use water. 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 generation of dust. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.

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 container tightly closed and in a well-ventilated place.

Keep container dry. Keep only in the original container.

Protect from heat and direct sunlight.

Hints on joint storage:

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

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
Ireland: 8 hours	10 mg/m ³ (Dust limit value, inhalable fraction)
Ireland: 8 hours	4 mg/m ³ (Dust limit value, respirable fraction)

8.2 Exposure controls

Use acid resistant materials and devices.

Inspect electric installations more frequently for corrosion damage.

Provide good ventilation and/or an exhaust system in the work area.

In the case of the formation of dust: Dust should be exhausted directly at the point of origin.

Personal protection equipment

Occupational exposure controls

Respiratory protection:

Respiratory protection must be worn whenever the WEL levels have been exceeded.

Dust mask or Combination filter Use combination filter type A-(P3) according to EN 14387.

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.

Hand protection:	Protective gloves according to EN 374. Glove material: Nitrile rubber-Layer thickness: 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 generation of dust. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical state at 20 °C and 101.3 kPa	solid
Colour:	Form: Tablets white/blue
Odour:	odourless
Odour threshold:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Flash point/flash point range:	Not applicable
Decomposition temperature:	No data available
pH:	at 20 °C, 10 g/L: 1.0
Viscosity, kinematic:	No data available
Water solubility:	at 80 °C: easily soluble
Partition coefficient: n-octanol/water:	No data available
Vapour pressure:	No data available
Density:	No data available
Vapour density:	No data available
Particle characteristics:	No data available

9.2 Other information

Explosive properties:	No data available
Oxidizing characteristics:	No data available
Auto-ignition temperature:	No data available
Evaporation rate:	No data available
Additional information:	No data available

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

No dangerous reactions with proper and specified storage and handling
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

Humidity. Keep away from heat sources, sparks and open flames. Protect from direct sunlight.

10.5 Incompatible materials

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

10.6 Hazardous decomposition products

No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition: No data available

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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.

May be harmful if swallowed.

ATEmix (calculated): 2,000 mg/kg < ATE ≤ 5,000 mg/kg

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

ATEmix (calculated): ATE > 5,000 mg/kg

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: Skin Sens. 1; H317 = May cause an allergic skin reaction.

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): STOT SE 3; H335 = May cause respiratory irritation.

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

Aspiration hazard: Lack of data.

11.2 Information on other hazards

Endocrine disrupting properties: No data available

Other information: A corrosive effect cannot be ruled out because of the pH value.

Information about Maleic acid:

LD50 Rat, oral: 708 mg/kg

LD50 Rabbit, dermal: > 1560 mg/kg

Symptoms

Other symptoms: Cough, shortage of breath. Pulmonary edema is possible. Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Abdominal pain, vomiting, burns.

Symptoms may occur with delay.

After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

SECTION 12: Ecological information**12.1 Toxicity**

Aquatic toxicity:

Harmful effects on water organisms by modification of pH-value.

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

Information about Sulphamidic acid:

Bacterial toxicity:

EC50 Activated sludge: > 200 mg/L/3h (OECD 209)

Algae toxicity:

EC50 *Desmodesmus subspicatus* (green algae): 48 mg/L/72h (OECD 201)

NOEC *Desmodesmus subspicatus* (green algae): 18 mg/L/72h (OECD 201)

Daphnia toxicity:

EC50 *Daphnia magna* (Big water flea): 71.6 mg/L/48h (OECD 202)

Fish toxicity:

LC50 *Pimephales promelas* (fathead minnow): 70.3 mg/L/96h (OECD 203)

12.2 Persistence and degradability

Further details:

No data available

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 Endocrine disrupting properties

No data available

12.7 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:

Special waste. Dispose of waste according to applicable legislation.

Do not dispose of with household waste.

Package

Recommendation:

Dispose of waste according to applicable legislation.

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

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

ADR/RID, IMDG, IATA-DGR: not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR: Not restricted

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR: not applicable

14.4 Packing group

ADR/RID, IMDG, IATA-DGR: not applicable

14.5 Environmental hazards

Dangerous for the environment: Substance/mixture is not environmentally hazardous according to the criteria of the UN model regulations.

Marine pollutant: no

14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations - EC member states****Labelling of packaging with <= 125mL content**

Signal word:

Warning

Hazard statements:

H317

May cause an allergic skin reaction.

H335

May cause respiratory irritation.

Precautionary statements:

P102

Keep out of reach of children.

P312

Call a POISON CENTER/doctor if you feel unwell.

P405

Store locked up.

P501

Dispose of contents to hazardous or special waste collection point.

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 75

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

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

H315 = Causes skin irritation.

H317 = May cause an allergic skin reaction.

H319 = Causes serious eye irritation.

H335 = May cause respiratory irritation.

H302 = Harmful if swallowed.

H312 = Harmful in contact with skin.

H412 = Harmful to aquatic life with long lasting effects.

Reason of change: General revision

Date of first version: 17/6/2019

Department issuing data sheet: see section 1: Department responsible for information

Abbreviations and acronyms:

- Acute Tox.: Acute toxicity
- 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
- ATE: Acute toxicity estimate
- 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
- EC50: Effective Concentration 50%
- EN: European Standard
- EQ: Excepted quantities
- EU: European Union
- 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
- LC50: Median lethal concentration
- LD50: Lethal dose 50%
- MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
- NOEC: No Observed Effect Concentration
- OEL: Occupational Exposure Limit Value
- OSHA: Occupational Safety and Health Administration
- PBT: Persistent, bioaccumulative and toxic
- PNEC: Predicted no-effect concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
- Skin Irrit.: Skin irritation
- Skin Sens.: Skin sensitisation
- STOT SE: Specific target organ toxicity - single exposure
- TLV: Threshold Limit Value
- TRGS: Technical Rules for Hazardous Substances
- vPvB: Very persistent and very bioaccumulative
- WEL: Workplace Exposure Limit

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/zh6kn38>

