



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 6/9/2019  
Version: 16  
Language: en-GB,IE  
Date of print: 1/9/2020

## Descaling tablets for the Bosch TASSIMO multi-drink system

Material number 311530/311599/TCZ6004/311840/TCZ6604/311909/311916

Page: 1 of 10

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

#### 1.1 Product identifier

Trade name: Descaling tablets for the Bosch TASSIMO multi-drink system

#### 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: 56283 Halsenbach

Germany

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

Great Britain:

In case of a medical emergency following exposure to a chemical, the public should call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 24 (UK only).

### 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.

**Descaling tablets for the Bosch TASSIMO multi-drink system**

Material number 311530/311599/TCZ6004/311840/TCZ6604/311909/311916

Page:

2 of 10

**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.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
P302+P352 IF ON SKIN: Wash with plenty of water/soap.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313 IF exposed or concerned: Get medical advice/attention.

**Special labelling**

Text for labelling: Contains Maleic acid and Sulphamidic acid.

**2.3 Other hazards**

No risks worthy of mention.

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:

| Ingredient                                                       | Designation               | Content   | Classification                                                                                                |
|------------------------------------------------------------------|---------------------------|-----------|---------------------------------------------------------------------------------------------------------------|
| REACH 01-2119457026-42-xxxx<br>EC No. 201-069-1<br>CAS 77-92-9   | Citric acid,<br>anhydrous | 30 - 60 % | Eye Irrit. 2; H319.                                                                                           |
| EC No. 203-742-5<br>CAS 110-16-7                                 | Maleic acid               | 10 - 25 % | Acute Tox. 4; H302.<br>Skin Irrit. 2; H315.<br>Eye Irrit. 2; H319.<br>Skin Sens. 1; H317.<br>STOT SE 3; H335. |
| REACH 01-2119488633-28-xxxx<br>EC No. 226-218-8<br>CAS 5329-14-6 | Sulphamidic acid          | 10 - 25 % | Skin Irrit. 2; H315.<br>Eye Irrit. 2; H319.<br>Aquatic Chronic 3; H412.                                       |

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

**Descaling tablets for the Bosch TASSIMO  
multi-drink system**

Material number 311530/311599/TCZ6004/311840/TCZ6604/311909/311916

Page:

3 of 10

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

|                         |                                                                                                                                                                                                                             |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General information:    | If victim is at risk of losing consciousness, position and transport on their side.                                                                                                                                         |
| In case of inhalation:  | Provide fresh air. Put victim at rest. Seek medical treatment in case of troubles.<br>If breathing becomes irregular or ceases, apply rescue breathing or artificial respiration immediately, where required supply oxygen. |
| Following skin contact: | After contact with skin, wash immediately with soap and plenty of water.<br>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.<br>Remove contact lenses. Subsequently consult an ophthalmologist.                                                          |
| After swallowing:       | Never give anything by mouth to an unconscious person.<br>Rinse mouth with water. Drink large quantities of water.<br>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.

**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**

In case of fire may be liberated: Nitrogen oxides (NO<sub>x</sub>), 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:                        | Hazchem-Code: -<br>Cool endangered containers with water spray and, if possible, remove from danger zone.<br>Use water spray jet to knock down vapours.<br>Do not breathe fumes. Do not allow fire water to penetrate into surface or ground water.<br>Fire water becomes acidic. |

**Descaling tablets for the Bosch TASSIMO  
multi-drink system**

Material number 311530/311599/TCZ6004/311840/TCZ6604/311909/311916

Page:

4 of 10

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

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

In case of dust formation: Provide adequate ventilation. Wear personal protection equipment.

**6.2 Environmental precautions**

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

**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: Avoid contact with skin and eyes. Avoid generation of dust. Do not breathe dust. When using do not eat, drink or smoke.

In case of dust formation: Provide adequate ventilation, and local exhaust as needed.

Wear personal protection equipment.

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 dry. Store at room temperature.

Hints on joint storage:

Do not store together with strong oxidizing agents or acids.

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) |

**Descaling tablets for the Bosch TASSIMO  
multi-drink system**

Material number 311530/311599/TCZ6004/311840/TCZ6604/311909/311916

Page:

5 of 10

Additional information: TWA: 10 mg/m<sup>3</sup> (inhalable dust)  
TWA: 4 mg/m<sup>3</sup> (respirable dust)

**8.2 Exposure controls**

Use acid resistant materials and devices.  
Inspect electric installations more frequently for corrosion damage.  
Provide fresh air. 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.

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 contact with skin and eyes.  
Change contaminated clothing.  
Provide a conveniently located eye rinse station.  
When using do not eat or drink.  
Wash hands before breaks and after work.

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

Appearance: Form: solid, Tablets  
Colour: white

Odour: odourless

Odour threshold: No data available

pH: at 20 °C, 10 g/L: 1.0

Melting point/freezing point: 132 - 135 °C

Initial boiling point and boiling range: No data available

Flash point/flash point range: > 100 °C

Evaporation rate: No data available

Flammability: No data available

Explosion limits: No data available

Vapour pressure: No data available

Vapour density: No data available

Density: No data available

Water solubility: at 80 °C: easily soluble

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

Auto-ignition temperature: No data available

Decomposition temperature: > 135 °C

**Descaling tablets for the Bosch TASSIMO  
multi-drink system**

Material number 311530/311599/TCZ6004/311840/TCZ6604/311909/311916

Page:

6 of 10

Viscosity, kinematic: No data available

Explosive properties: No data available

Oxidizing characteristics: No data available

**9.2 Other information**

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. Protect from excessive heat.

**10.5 Incompatible materials**

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

**10.6 Hazardous decomposition products**In case of fire may be liberated: Nitrogen oxides (NO<sub>x</sub>), sulphur oxides, Carbon monoxide and carbon dioxide.

Thermal decomposition: &gt; 135 °C

**Descaling tablets for the Bosch TASSIMO  
multi-drink system**

Material number 311530/311599/TCZ6004/311840/TCZ6604/311909/311916

Page:

7 of 10

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

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.  
ATEmix (calculated): 2000 mg/kg < ATE ≤ 5000 mg/kg.  
Information about maleic acid:  
LD50 Rat, oral: 708 mg/kg.  
Harmful if swallowed.  
Acute toxicity (dermal): Lack of data.  
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.

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

**Symptoms**

In case of inhalation: Inhalation of dust may cause irritation of the respiratory system.  
Other symptoms: cough, shortage of breath. Pulmonary edema is possible.  
Symptoms may occur with delay.  
In case of ingestion:  
Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.  
Other symptoms: Abdominal pain, vomiting, burns.

**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.

**12.2 Persistence and degradability**

Further details: No data available



## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 6/9/2019  
Version: 16  
Language: en-GB,IE  
Date of print: 1/9/2020

### Descaling tablets for the Bosch TASSIMO multi-drink system

Material number 311530/311599/TCZ6004/311840/TCZ6604/311909/311916

Page: 8 of 10

#### 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: Special waste. Dispose of waste according to applicable legislation.

##### Contaminated packaging

Recommendation: Waste key number 150101 - paper and cardboard packaging

Waste key number 150102 - Plastic packaging: OPP

Dispose of waste according to applicable legislation.

Non-contaminated packages may be recycled.

## SECTION 14: Transport information

#### 14.1 UN 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

Marine pollutant: no

**Descaling tablets for the Bosch TASSIMO  
multi-drink system**

Material number 311530/311599/TCZ6004/311840/TCZ6604/311909/311916

Page: 9 of 10

**14.6 Special precautions for user**

No dangerous good in sense of these transport regulations.

**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: -  
No data available**National regulations - EC member states**Volatile organic compounds (VOC):  
0 % by weight**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:

- H302 = Harmful if swallowed.
- H315 = Causes skin irritation.
- H317 = May cause an allergic skin reaction.
- H319 = Causes serious eye irritation.
- H335 = May cause respiratory irritation.
- H412 = Harmful to aquatic life with long lasting effects.

**Descaling tablets for the Bosch TASSIMO  
multi-drink system**

Material number 311530/311599/TCZ6004/311840/TCZ6604/311909/311916

Page:

10 of 10

## 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  
OEL: Occupational Exposure Limit Value  
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  
EU: European Union  
IATA: International Air Transport Association  
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  
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals  
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail  
STOT SE: Specific target organ toxicity - single exposure  
TLV: Threshold Limit Value  
vPvB: Very persistent and very bioaccumulative  
WEL: Workplace Exposure Limit

Reason of change: Changes in section 8: Exposure limit values  
General revision

Date of first version: 28/1/2008

**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/0vy5q8t0>

