

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date: 24.04.2015

Version number 6

Revision: 24.10.2014

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

#### 1.1 Product identifier

**Trade name: JURA Descaling tablets**

**1.2 Relevant identified uses of the substance or mixture and uses advised against**  
**Application of the substance / the mixture** Descaling tablets for fully automatic coffee machines

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

**Manufacturer/Supplier: -**

**Supplier:**

Jura Elektroapparate AG  
CH-4626 Niederbuchsiten  
Tel.: +41 (0)62 389 81 81

Jura Elektrogeräte Vertriebs-GmbH  
D-90268 Nürnberg  
Tel.: +49 (0)911 25 25 0

**Manufacturer:**

Oxytabs Tablettenproduktion GmbH  
- Member of the Medea Group -  
Suhmsberg 40  
D-24768 Rendsburg

**Further information obtainable from:**

Tel.: +49 4331 69620 0  
Fax: +49 4331 69620 22  
E-Mail: info@medeagroup.de

#### 1.4 Emergency telephone number:

Giftnotruf der Charité – Universitätsmedizin Berlin  
D-13437 Berlin, Tel. +49 (0)30 30686 790

Schweizerisches Toxikologisches Informationszentrum  
CH-8028 Zürich, Tel. +41 (0)44 2515151 oder 145

Vergiftungs-Informationszentrale in Österreich  
A-1090 Wien, +43(0)1 406 43 43

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**

Acute Tox. 4 H302 Harmful if swallowed.  
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.

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Xn; Harmful  
R22: Harmful if swallowed.  
Xi; Irritant  
R36/38: Irritating to eyes and skin.

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Xi; Sensitising

R43: May cause sensitisation by skin contact.

**Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**Classification system:**

The classification is according to the latest editions of the EU lists and extended by company and literature data.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

**Hazard pictograms**

GHS07

**Signal word** Warning**Hazard-determining components of labelling:**

maleic acid

**Hazard statements**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

**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.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local regulations.

**2.3 Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

**3.2 Chemical characterisation: Mixtures**

**Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

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|---|--|--------------------|
| CAS: 110-16-7<br>EINECS: 203-742-5                                    | maleic acid<br>Xn R22; Xi R36/37/38; Xi R43<br>Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319;<br>Skin Sens. 1, H317; STOT SE 3, H335 | 25-50%             |
| CAS: 5329-14-6<br>EINECS: 226-218-8<br>Reg.nr.: 01-2119488633-28-0000 | sulphamidic acid<br>Xi R36/38<br>R52/53<br>Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3,<br>H412                                     | 10-<25%            |
| CAS: 95-14-7<br>EINECS: 202-394-1<br>Reg.nr.: 01-2119979079-20-0000   | benzotriazole<br>Xn R22<br>Aquatic Chronic 2, H411; Acute Tox. 4, H302; Eye Irrit. 2,<br>H319  | 1-≤2.5%            |

**Additional information:** For the wording of the listed risk phrases refer to section 16.

#### SECTION 4: First aid measures

##### 4.1 Description of first aid measures

**After inhalation:** Supply fresh air.

**After skin contact:** Immediately rinse with water.

**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting.

If symptoms persist consult doctor.

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

No further relevant information available.

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

No further relevant information available.

#### SECTION 5: Firefighting measures

##### 5.1 Extinguishing media

**Suitable extinguishing agents:**
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray.

Product itself does not burn.

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

No further relevant information available.

##### 5.3 Advice for firefighters

**Protective equipment:** In the danger area always wear a self-contained breathing apparatus.

**Additional information**

Collect contaminated fire fighting water separately. It must not enter the sewage system.

#### SECTION 6: Accidental release measures

##### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

##### 6.2 Environmental precautions:

 Do not allow to enter sewers/ surface or ground water.

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### 6.3 Methods and material for containment and cleaning up:

Pick up mechanically.  
Dispose of the material collected according to regulations.  
Wash residues with water.

### 6.4 Reference to other sections

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Prevent formation of dust.  
When handling larger quantities of dissolved product: Avoid contact with eyes and skin  
**Information about fire and explosion protection:** No special measures required.

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

#### Storage:

**Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.

**Information about storage in one common storage facility:** Not required.

#### Further information about storage conditions:

Temperature: if possible not above 50 °C.  
Air humidity: if possible not above 80 %.  
Temperature changes: not relevant.  
Keep container tightly sealed.

**7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

**Additional information about design of technical facilities:** No further data; see item 7.

### 8.1 Control parameters

#### Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Additional information:** The lists valid during the making were used as basis.

### 8.2 Exposure controls

#### Personal protective equipment:

##### General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.

**Respiratory protection:** Not required.

##### Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

##### Material of gloves

Nitrile rubber, NBR

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Recommended thickness of the material:  $\geq 0.11$  mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Wear tightly sealed safety glasses when handling the solution.

**Body protection:** Protective work clothing

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### General Information

**Appearance:**

|                         |                 |
|-------------------------|-----------------|
| <b>Form:</b>            | Tablets         |
| <b>Colour:</b>          | White           |
| <b>Odour:</b>           | Characteristic  |
| <b>Odour threshold:</b> | Not determined. |

|                  |                         |
|------------------|-------------------------|
| <b>pH-value:</b> | (100 g/l, 20 °C)<br>1,5 |
|------------------|-------------------------|

**Change in condition**

|                                     |                 |
|-------------------------------------|-----------------|
| <b>Melting point/Melting range:</b> | Not determined. |
| <b>Boiling point/Boiling range:</b> | Not determined. |

|                     |                 |
|---------------------|-----------------|
| <b>Flash point:</b> | Not applicable. |
|---------------------|-----------------|

|                                       |                 |
|---------------------------------------|-----------------|
| <b>Flammability (solid, gaseous):</b> | Not determined. |
|---------------------------------------|-----------------|

|                              |                 |
|------------------------------|-----------------|
| <b>Ignition temperature:</b> | Not determined. |
|------------------------------|-----------------|

|                                   |                 |
|-----------------------------------|-----------------|
| <b>Decomposition temperature:</b> | Not determined. |
|-----------------------------------|-----------------|

|                       |                              |
|-----------------------|------------------------------|
| <b>Self-igniting:</b> | Product is not selfigniting. |
|-----------------------|------------------------------|

|                             |   |
|-----------------------------|---|
| <b>Danger of explosion:</b> | Product does not present an explosion hazard. |
|-----------------------------|---|

**Explosion limits:**

|               |                 |
|---------------|-----------------|
| <b>Lower:</b> | Not determined. |
| <b>Upper:</b> | Not determined. |

|                         |                 |
|-------------------------|-----------------|
| <b>Vapour pressure:</b> | Not applicable. |
|-------------------------|-----------------|

|                         |                 |
|-------------------------|-----------------|
| <b>Density:</b>         | Not determined. |
| <b>Relative density</b> | Not determined. |
| <b>Vapour density</b>   | Not applicable. |
| <b>Evaporation rate</b> | Not applicable. |

**Solubility in / Miscibility with water:**

Easily soluble.

|   |                 |
|---|-----------------|
| <b>Partition coefficient (n-octanol/water):</b> | Not determined. |
|---|-----------------|

**Viscosity:**

|                   |                 |
|-------------------|-----------------|
| <b>Dynamic:</b>   | Not applicable. |
| <b>Kinematic:</b> | Not applicable. |

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**Solvent content:**

|                          |        |
|--------------------------|--------|
| <b>Organic solvents:</b> | 0.0 %  |
| <b>VOC (EC)</b>          | 0.00 % |

|                        |         |
|------------------------|---------|
| <b>Solids content:</b> | 100.0 % |
|------------------------|---------|

|                              |  |
|------------------------------|--|
| <b>9.2 Other information</b> | No further relevant information available. |
|------------------------------|--|

### SECTION 10: Stability and reactivity

**10.1 Reactivity** No further relevant information available.**10.2 Chemical stability****Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

**10.3 Possibility of hazardous reactions** No dangerous reactions known.**10.4 Conditions to avoid** No further relevant information available.**10.5 Incompatible materials:** Alkali (lye)**10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

**11.1 Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:****110-16-7 maleic acid**

|        |      |                     |
|--------|------|---------------------|
| Oral   | LD50 | 708 mg/kg (rat)     |
| Dermal | LD50 | 1560 mg/kg (rabbit) |

**5329-14-6 sulphamidic acid**

|      |      |                  |
|------|------|------------------|
| Oral | LD50 | 3160 mg/kg (rat) |
|------|------|------------------|

**95-14-7 benzotriazole**

|        |      |                            |
|--------|------|----------------------------|
| Oral   | LD50 | 500 mg/kg (rat) (OECD 423) |
| Dermal | LD50 | >2000 mg/kg (rabbit)       |

**Primary irritant effect:****on the skin:** Irritant to skin and mucous membranes.**on the eye:** Irritating effect.**Sensitisation:** Sensitisation possible through skin contact.**Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

### SECTION 12: Ecological information

**12.1 Toxicity****Aquatic toxicity:****110-16-7 maleic acid**

|          |                                   |
|----------|-----------------------------------|
| EC50/24h | 160 mg/l (Daphnia magna) (IUCLID) |
|----------|-----------------------------------|

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|                                   |                                     |
|-----------------------------------|-------------------------------------|
| <b>5329-14-6 sulphamidic acid</b> |                                     |
| LC50/96h                          | 70.3 mg/l (Pimephales promelas)     |
| <b>95-14-7 benzotriazole</b>      |                                     |
| EC50/48h                          | 107 mg/l (Daphnia magna) (OECD 202) |
| LC50/96h                          | 180 mg/l (Danio rerio) (OECD 203)   |

**12.2 Persistence and degradability** The organic portion of the product is biodegradable.

**12.3 Bioaccumulative potential** No further relevant information available.

**12.4 Mobility in soil** No further relevant information available.

**Additional ecological information:**

**General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**12.5 Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

**13.1 Waste treatment methods**

**Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulations.

**Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

|   |                 |
|---|-----------------|
| <b>14.1 UN-Number</b>   |                 |
| ADR, ADN, IMDG, IATA  | not regulated   |
| <b>14.2 UN proper shipping name</b>   |                 |
| ADR, ADN, IMDG, IATA  | not regulated   |
| <b>14.3 Transport hazard class(es)</b>  |                 |
| ADR, ADN, IMDG, IATA  |                 |
| Class   | not regulated   |
| <b>14.4 Packing group</b>   |                 |
| ADR, IMDG, IATA   | not regulated   |
| <b>14.5 Environmental hazards:</b>  |                 |
| <b>Marine pollutant:</b>  | No              |
| <b>14.6 Special precautions for user</b>  | Not applicable. |
| <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |

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**UN "Model Regulation":** -

### SECTION 15: Regulatory information

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

**Labelling according to Regulation (EC) No 1272/2008** GHS label elements

#### National regulations:

The product is subject to be labeled according to the prevailing version of the regulations on hazardous substances.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### Relevant phrases

- 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.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.
- R22 Harmful if swallowed.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R36/38 Irritating to eyes and skin.
- R43 May cause sensitisation by skin contact.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Department issuing MSDS:** Department R&D

**Contact:** Dr. Niels Ole Vesterager

#### Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

**\* Data changed with respect to previous version.**