

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Rema Flux

Revision date: 10.02.2020

Product code: 102-304

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

#### 1.1. Product identifier

Rema Flux

#### Further trade names

Article No.: 102-304-00

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

##### Use of the substance/mixture

Health services.

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

|               |                         |                           |
|---------------|-------------------------|---------------------------|
| Company name: | DENTAURUM GmbH & Co. KG |                           |
| Street:       | Turnstr. 31             |                           |
| Place:        | D-75228 Ispringen       |                           |
| Telephone:    | +49 7231 803 0          | Telefax: +49 7231 803 295 |
| e-mail:       | info@dentaurum.de       |                           |
| Internet:     | www.dentaurum.com       |                           |

#### Further Information

Emergency telephone:  
 07:00 - 16:15 (Mo - Do), 07:00 - 13:15 (Fr) +49 7231 803 184  
 16:15 - 18:00 (Mo - Do), 13:15 - 18:00 (Fr) +49 7231 803 0

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Regulation (EC) No. 1272/2008

Hazard categories:  
 Serious eye damage/eye irritation: Eye Irrit. 2  
 Reproductive toxicity: Repr. 1B  
 Hazard Statements:  
 Causes serious eye irritation.  
 May damage fertility. May damage the unborn child.

#### 2.2. Label elements

##### Regulation (EC) No. 1272/2008

##### Hazard components for labelling

disodium tetraborate pentahydrate; borax pentahydrate  
 boric acid  
 quartz

Signal word: Danger

##### Pictograms:



##### Hazard statements

H319 Causes serious eye irritation.  
 H360FD May damage fertility. May damage the unborn child.

##### Precautionary statements

P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P337+P313 If eye irritation persists: Get medical advice/attention.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.  
 P501 Dispose of contents/container to an appropriate recycling or disposal facility.

### Special labelling of certain mixtures

Restricted to professional users.

### 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Fluxes

#### Hazardous components

| CAS No     | Chemical name  |              |          | Quantity     |
|------------|--|--------------|----------|--------------|
|            | EC No  | Index No     | REACH No |              |
|            | GHS Classification   |              |          |              |
| 12179-04-3 | disodium tetraborate pentahydrate; borax pentahydrate                  |              |          | 6,5 - < 35 % |
|            | 215-540-4  | 005-011-02-9 |          |              |
|            | Repr. 1B; H360FD   |              |          |              |
| 10043-35-3 | boric acid   |              |          | 5,5 - < 30 % |
|            | 233-139-2  | 005-007-00-2 |          |              |
|            | Repr. 1B; H360FD   |              |          |              |
| 7732-18-5  | water  |              |          | 15 - 30 %    |
|            | 213-791-2  |              |          |              |
|            |  |              |          |              |
| 13775-52-5 | tripotassium hexafluoroaluminate                                       |              |          | 5 - 15 %     |
|            |  |              |          |              |
|            | Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT SE 3; H315 H319 H335 H336 |              |          |              |
| 14808-60-7 | quartz   |              |          | 1 - < 15%    |
|            |  |              |          |              |
|            | STOT RE 1; H372  |              |          |              |

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### After inhalation

Provide fresh air.  
 In all cases of doubt, or when symptoms persist, seek medical advice.  
 Move victim out of danger zone.

#### After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water.  
 Take off immediately all contaminated clothing and wash it before reuse.  
 Medical treatment necessary.

#### After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

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### After ingestion

Rinse mouth thoroughly with water.  
Medical treatment necessary.

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

No information available.

### **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**

Co-ordinate fire-fighting measures to the fire surroundings.

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

Non-flammable.

### **5.3. Advice for firefighters**

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

### **Additional information**

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.  
Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

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

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.  
Avoid dust formation.

### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

### **6.3. Methods and material for containment and cleaning up**

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

### **6.4. Reference to other sections**

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

## SECTION 7: Handling and storage

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used.  
Avoid dust formation.  
Provide adequate ventilation.  
Do not breathe smoke. Do not breathe dusts or mists.  
Do not eat, drink or smoke when using this product.  
Wash hands before breaks and after work.  
Keep away from food, drink and animal feedingstuffs.

#### **Advice on protection against fire and explosion**

No special fire protection measures are necessary.

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

#### **Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only.

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Provide adequate ventilation as well as local exhaust at critical locations. Keep only in the original container. Storage: at room temperature

### Hints on joint storage

No special measures are necessary.

### 7.3. Specific end use(s)

Health services.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

### 8.2. Exposure controls



#### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation.

#### Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

#### Eye/face protection

Suitable eye protection: goggles.

#### Hand protection

Recommendation:

Dermatril 740 Single-use gloves. NBR (Nitrile rubber). 0,11 mm

penetration time (maximum wearing period): 480 min.

REF 162-907-00 (7/S), REF 162-908-00 (8/M), REF 162-909-00 (9/L)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### Skin protection

Wear suitable protective clothing.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection. exceeding exposure limit values: Filtering device (full mask or mouthpiece) with filter: B E P3 EN 14387

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                                      |           |        |
|--------------------------------------|-----------|--------|
| Physical state:                      | Paste     |        |
| Colour:                              | white     |        |
| Odour:                               | odourless |        |
| pH-Value (at 20 °C):                 |           | 8      |
| <b>Changes in the physical state</b> |           |        |
| Melting point:                       |           | 700 °C |

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|  |                |
|--|----------------|
| Initial boiling point and boiling range: | 110 °C         |
| Sublimation point:                       | not determined |
| Softening point:                         | not determined |
| Pour point:                              | not determined |
| Flash point:                             | not applicable |

**Flammability**

|        |                |
|--------|----------------|
| Solid: | not determined |
| Gas:   | not applicable |

|                         |                |
|-------------------------|----------------|
| Lower explosion limits: | not determined |
| Upper explosion limits: | not determined |
| Ignition temperature:   | not determined |

**Auto-ignition temperature**

|        |                |
|--------|----------------|
| Solid: | not determined |
| Gas:   | not applicable |

|                            |                |
|----------------------------|----------------|
| Decomposition temperature: | not determined |
|----------------------------|----------------|

**Oxidizing properties**

Not oxidising.

|                                 |                       |
|---------------------------------|-----------------------|
| Vapour pressure:                | not determined        |
| Vapour pressure:                | not determined        |
| Density:                        | 1,5 g/cm <sup>3</sup> |
| Bulk density:                   | not determined        |
| Water solubility:<br>(at 20 °C) | approx. 180 g/L       |

**Solubility in other solvents**

not determined

|                          |                 |
|--------------------------|-----------------|
| Partition coefficient:   | not determined  |
| Viscosity / dynamic:     | 3000-8000 mPa·s |
| Viscosity / kinematic:   | not determined  |
| Flow time:               | not determined  |
| Vapour density:          | not determined  |
| Evaporation rate:        | not determined  |
| Solvent separation test: | not determined  |
| Solvent content:         | not determined  |

**9.2. Other information**

|                  |                |
|------------------|----------------|
| Solid content:   | not determined |
| Odour threshold: | not applicable |

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

No known hazardous reactions.

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#### **10.4. Conditions to avoid**

Keep away from heat.

#### **10.5. Incompatible materials**

Materials to avoid: Strong acid  
Sulfuric acid.

#### **10.6. Hazardous decomposition products**

heat.: Formation of: Fluorhydric acid.

### **SECTION 11: Toxicological information**

#### **11.1. Information on toxicological effects**

##### **Acute toxicity**

Based on available data, the classification criteria are not met.

| CAS No     | Chemical name  |                   |         |                    |        |
|------------|----------------|-------------------|---------|--------------------|--------|
|            | Exposure route | Dose              | Species | Source             | Method |
| 10043-35-3 | boric acid     |                   |         |                    |        |
|            | oral           | LD50 > 2600 mg/kg | Rat     | OECD 401           |        |
|            | dermal         | LD50 > 2000 mg/kg | Rabbit  | FIFRA (40 CFR 163) |        |

##### **Irritation and corrosivity**

Causes skin irritation.  
Causes serious eye irritation.

##### **Sensitising effects**

Based on available data, the classification criteria are not met.

##### **Carcinogenic/mutagenic/toxic effects for reproduction**

May damage fertility. May damage the unborn child.  
Germ cell mutagenicity: Based on available data, the classification criteria are not met.  
Carcinogenicity: Based on available data, the classification criteria are not met.

##### **STOT-single exposure**

Based on available data, the classification criteria are not met.

##### **STOT-repeated exposure**

Causes damage to organs through prolonged or repeated exposure.

##### **Aspiration hazard**

Based on available data, the classification criteria are not met.

##### **Additional information on tests**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].  
Special hazards arising from the substance or mixture!

### **SECTION 12: Ecological information**

#### **12.1. Toxicity**

Toxicological data are not available.

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| CAS No     | Chemical name            |      |           |         |                                      |                    |
|------------|--------------------------|------|-----------|---------|--------------------------------------|--------------------|
|            | Aquatic toxicity         | Dose | [h]   [d] | Species | Source                               | Method             |
| 10043-35-3 | boric acid               |      |           |         |                                      |                    |
|            | Acute fish toxicity      | LC50 | 79,7 mg/l | 96 h    | Pimephales promelas (fathead minnow) | EPA OPPTS 850.1075 |
|            | Acute crustacea toxicity | EC50 | 93 mg/l   | 48 h    | Daphnia magna (Big water flea)       | OECD Guideline 202 |
|            | Fish toxicity            | NOEC | 6,4 mg/l  | 34 d    | Brachydanio rerio (zebra-fish)       | OECD Guideline 210 |
|            | Crustacea toxicity       | NOEC | 31,6 mg/l | 21 d    | Lampsilis siliquoidea                | ASTM E 2455-6      |

#### 12.2. Persistence and degradability

The product has not been tested.

#### 12.3. Bioaccumulative potential

The product has not been tested.

#### Partition coefficient n-octanol/water

| CAS No     | Chemical name | Log Pow |
|------------|---------------|---------|
| 10043-35-3 | boric acid    | -1,09   |

#### BCF

| CAS No     | Chemical name | BCF   | Species                  | Source |
|------------|---------------|-------|--------------------------|--------|
| 10043-35-3 | boric acid    | < 0.1 | Oncorhynchus tshawytscha |        |

#### 12.4. Mobility in soil

The product has not been tested.

#### 12.5. Results of PBT and vPvB assessment

The product has not been tested.

#### 12.6. Other adverse effects

No information available.

#### Further information

Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### **Disposal recommendations**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.  
06 02 99, 12 01 99, 16 05 07

##### **Contaminated packaging**

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself. Dispose of waste according to applicable legislation.

### SECTION 14: Transport information

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

No information available.

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

not applicable

#### Other applicable information

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Not a hazardous material with respect to transportation regulations.

## SECTION 15: Regulatory information

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

#### EU regulatory information

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):  
disodium tetraborate pentahydrate; borax pentahydrate; boric acid

Restrictions on use (REACH, annex XVII):

Entry 30: disodium tetraborate pentahydrate; borax pentahydrate; boric acid

#### National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D):

1 - slightly hazardous to water

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 2.

#### 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 Harmonized 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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

#### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

| Classification     | Classification procedure |
|--------------------|--------------------------|
| Eye Irrit. 2; H319 | Calculation method       |
| Repr. 1B; H360FD   | Calculation method       |

#### Relevant H and EUH statements (number and full text)

|        |   |
|--------|---|
| H315   | Causes skin irritation.   |
| H319   | Causes serious eye irritation.                                  |
| H335   | May cause respiratory irritation.                               |
| H336   | May cause drowsiness or dizziness.                              |
| H360FD | May damage fertility. May damage the unborn child.              |
| H372   | Causes damage to organs through prolonged or repeated exposure. |

#### Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of



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processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*