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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:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Reproductive toxicity: Repr. 1B

Specific target organ toxicity - repeated exposure: STOT RE 1

Hazard Statements:

Causes serious eve 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

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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P362+P364 Take off contaminated clothing and wash it before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.
P308+P313 IF exposed or concerned: Get medical advice/attention.

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				
	EC No	Index No	REACH No		
	Classification according to Reg	ulation (EC) No. 1272/2008 [CLI	P]		
12179-04-3	disodium tetraborate pentahydrate; borax pentahydrate				
	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.

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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.

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.

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

Advice on storage compatibility

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 qas/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

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Test method

pH-Value (at 20 °C):

Changes in the physical state

Melting point: 700 °C
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 oxidizing.

Vapour pressure:

Vapour pressure:

Density:

1,5 g/cm³

Bulk density:

not determined

not determined

vapour pressure:

1,5 g/cm³

not determined

vater solubility:

(at 20 °C)

Solubility in other solvents

not determined

Partition coefficient: not determined 3000-8000 mPa·s Viscosity / dynamic: not determined Viscosity / kinematic: 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

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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.

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	
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
10043-35-3	Boric acid					
	Acute fish toxicity	LC50	79,7 mg/l		Pimephales promelas (fathead minnow)	EPA OPPTS 850.1075
	Acute crustacea toxicity	EC50	93 mg/l		Daphnia magna (Big water flea)	OECD Guideline 202
	Fish toxicity	NOEC	6,4 mg/l		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 tschawytscha	

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

Advice on disposal

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

according to Regulation (EC) No 1907/2006

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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

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 contaminating class (D): 1 - slightly water contaminating

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): 2,4,5,6,7,8,9,10,11,12,13,14,15,16.

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%

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 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.)