Completed 16-10-2023 Revision: (date) 23-02-2024

SDS version

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

1.1. Product Identifier

Trade Name: eTCP Powder

Product- no.:

R0HA-RVFG-R20C-2TUA HFI

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

Recommended uses:

Surface treatment.

Uses advised against:

This product must not be used for purposes other than those recommended without first seeking the advice of the supplier.

1.3. Details of the supplier of the safety data sheet

Company and address:

Ditrimex ApS Sverigesvej 9 DK-8700 Horsens +45 2672 2288

Contact person and E-mail:

info@ditrimex.com

The Safety data sheet is completed and validated by:

Mediator A/S, Centervej 2, DK-6000 Kolding. Consultant: MKH

1.4. Emergency telephone number

Use your national or local emergency number - For "First aid measures" see section 4.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP (1272/2008): Acute Tox. 4:H302 Skin Irrit. 2;H315 Skin Sens. 1;H317 Eye Dam. 1;H318 Aquatic Chronic 3;H412

See full text of H-phrases in section 16.

2.2. Label elements





Signal word:

Danger

Harmful if swallowed. (H302) Causes skin irritation. (H315) May cause an allergic skin reaction. (H317) Causes serious eye damage. (H318)

Harmful to aquatic life with long lasting effects. (H412)

Avoid breathing dust. (P261)

Avoid release to the environment. (P273)

Wear protective gloves/eyeprotection/face protection. (P280)

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. (P305 + P351 + P338 + P310)

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

Store in a well-ventilated place. Keep container tightly closed. (P403 + P233)

Dispose of contents/container in accordance with local regulation. (P501)

2.3. Other hazards

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Additional labelling:

-

Additional warnings

-

SECTION 3: Composition/information on ingredients

3.1 /3.2 Substances/Mixtures

| Substance | EU-Index no. / REACH-Reg. no. | CAS-no. | EINECS-no. | CLP-classification | Wt/Wt % | Note |
|---------------------------------|----------------------------------|------------|------------|---|-----------|------|
| Chromium Hydroxide Sulphate | - / 01-2120761005- 64-xxxx | 12336-95-7 | | Skin Irrit. 2;H315, Skin Sens. 1;H317, Eye Irrit. 2;H319, Aquatic Chronic 3;H412 | 60 - < 70 | - |
| Dipotassium hexafluorozirconate | - / 01-2119978269- 18-xxxx | 16923-95-8 | 240-985-6 | Acute Tox. 3;H301, Eye Dam. 1;H318 | 30 - < 40 | - |
| Benzoxazole-2-thiol | - / - | 2382-96-9 | | Skin Irrit. 2;H315, Eye Irrit. 2;H319, STOT SE 3;H335 | 1 - < 3 | - |

See full text of H-phrases in section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Seek fresh air.

Keep victim under observation.

Seek medical advice in case of discomfort.

Ingestion:

Wash out mouth thoroughly and drink 1-2 glasses of water in small sips.

Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact:

Remove contaminated clothing.

Wash the skin thoroughly with water and continue washing for a long time.

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

Eye contact:

Open eye wide, remove any contact lenses and flush immediately with water (preferably using eye wash equipment). Seek medical advice

Additional information:

When obtaining medical advice, show the safety data sheet or label.

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

Harmful if swallowed.

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

Causes serious eye damage.

Sensitivity effects: This product contains substances which can give an allergic reaction on contact with skin. The allergic reaction will typically set in 12-72 hours after exposure as the substance penetrates the skin and reacts with proteins in the outer skin. The body's immune system sees the chemically changed protein as a foreign body and will try to destroy it.

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

Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Surrounding fire:

Extinguish with powder, foam, carbon dioxide or water mist.

Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture

The product is not directly flammable. Avoid inhalation of vapour and fumes – seek fresh air.

Hazardous fumes are formed in fire conditions.

Exposure to decomposition products may cause a health hazard.

5.3. Advice for firefighters

If there is a risk of exposure to vapour and flue gases, a self-contained breathing apparatus must be worn. Fire fighters should wear appropriate protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8 for type of protective equipment.

Avoid breathing and contact with skin and eyes.

6.2. Environmental precautions

Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains.

Prevent spillage from entering drains and/or surface water.

6.3. Methods and material for containment and cleaning up

Pick up mechanically.

6.4. Reference to other sections

See section 8 for type of protective equipment.

See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

See section 8 for information about precautions for use and personal protective equipment.

Use the product under well-ventilated conditions.

Running water and eye wash equipment must be available.

7.2. Conditions for safe storage, including any incompatibilities

The product must be stored safely and away from food, animal feeding stuffs, medicines, etc.

Keep in tightly closed original packaging.

Store in a dry, cool, well-ventilated area.

7.3. Specific end use(s)

See application section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Substance | exposure limit mg/m ³ / ppm | exposure limit mg/m ³ / ppm | Not |
|--|---|---|-----|
| Chromium Metal, Inorganic Chromium(II) Compounds and Inorganic Chromium(III) Compounds (insoluble) | 2/- | -/- | - |
| Fluor | 1,58 / 1 | 3,16 / 2 | - |

DNEL/PNEC-values:

DNEL Chromium hydroxide sulphate

| | Workers | Consumers |
|-------------------------|---------|------------------|
| Oral - Chronic Systemic | - | 150 μg/kg bw/day |

Workers

DNEL Dipotassium hexafluorozirconate

| Inhalation - Chronic Systemic | 6,2 mg/m ³ | - |
|-------------------------------|-----------------------|-------------------|
| Inhalation - Acute Systemic | 6,2 mg/m ³ | - |
| Inhalation - Chronic Local | 6,2 mg/m ³ | - |
| Dermal - Chronic Systemic | 89 mg/kg bw/day | 44,5 mg/kg bw/day |
| Dermal - Acute Systemic | 89 mg/kg bw/day | 44,5 mg/kg bw/day |
| | | |

Consumers

PNEC Chromium hydroxide sulphate

 $\begin{array}{lll} Fresh \ water & 60 \ \mu g/L \\ Intermittent \ releases \ (Fresh \ water) & 60 \ \mu g/L \\ Marine \ water & 6 \ \mu g/L \\ Intermittent \ releases \ (Marine \ water) & 6 \ \mu g/L \\ \end{array}$

PNEC Dipotassium hexafluorozirconate

 Fresh water
 0,163 mg/L

 Intermittent releases (Fresh water)
 0,107 mg/L

 Marine water
 0,163 mg/L

 Soil
 22,5 mg/kg soil dw

8.2. Exposure controls

There are no exposure scenarios for this product.

Appropriate engineering controls:

Wear the personal protective equipment specified below.

Wash hands before breaks, before using restroom facilities, and at the end of work.

Personal protective equipment:





Respiratory protection:

In case of insufficient ventilation, wear respiratory protective equipment with P2 filter. Respiratory protective equipment shall comply with one of the following standards: EN 136/140/145.

Hand protection:

Wear protective gloves made of nitrile rubber (> 0,11 mm). Protective gloves conforming to EN 374. Penetration time: > 60 min

Eye/face protection:

Wear safety goggles/face protection. Eye protection conforming to EN 166.

Skin protection:

Special work clothing should be used.

Environmental exposure controls:

Ensure compliance with local regulations for emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Solid substance
Colour: Dark brown
Odour: -

Melting point/ Freezing Point (°C):

- Rolling point or initial boiling point and boiling range (°C):

Boiling point or initial boiling point and boiling range (°C):

Flammability:

Lower and upper explosion limit (vol-%):

Flash point (°C):

Auto-ignition temperature (°C):

Decomposition temperature (°C):

-

pH: 3,1 - 3,5 (8 g/L water)

Kinematic viscosity (mm2/s):

Solubility: Soluble in water
Partition coefficient n-octanol/water (log value) -

Vapour pressure:

Density and/or relative density: 1,01 (8 g/L water)

Relative vapour density:

Particle characteristics:

9.2. Other information

Decomposition temperature (°C): > 1200 °C (> 2192 °F)

SECTION 10: Stability and reactivity

10.1. Reactivity

No data.

10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Avoid contact with strong oxidising agents.

10.6. Hazardous decomposition products

No special precautions regarding contact with other materials at the recommended storage conditions.

SECTION 11: Toxicological information

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

Acute toxicity:

Harmful if swallowed.

| Substance | exposure | Species | Test | Result |
|---------------------|----------|---------|------|-----------------------|
| Chromium Hydroxide | Oral | Rat | LD50 | > 5000 mg/kg bw |
| Sulphate | | | | |
| Dipotassium | Oral | Rat | LD50 | > 25 - < 200 mg/kg bw |
| hexafluorozirconate | | | | |

Skin corrosion/irritation:

Irritating to skin – may cause reddening.

Serious eye damage/irritation:

Causes serious eye damage.

Respiratory or skin sensitisation:

May cause sensitization by skin contact. Symptoms include reddening, swelling, blistering and ulceration - often slowly developing.

Germ cell mutagenicity:

Based on the existing data, the classification is not met.

Carcinogenicity:

Based on the existing data, the classification is not met.

Reproductive toxicity:

Based on the existing data, the classification is not met.

STOT-single exposure:

Based on the existing data, the classification is not met.

STOT-repeated exposure:

Based on the existing data, the classification is not met.

Aspiration hazard:

Based on the existing data, the classification is not met.

11.2. Information on other hazards

Test data are not available.

SECTION 12: Ecological information

| 12.1. Toxicity Substance Chromium Hydroxide Sulphate | Test duration 96 Hours | Species Fish | Test LC50 | Result 97,7 mg/L |
|--|----------------------------------|------------------------|--------------|---------------------|
| Chromium Hydroxide Sulphate | 48 Hours | Daphnia | EC50 | ~ 16,8 mg/L |
| Chromium Hydroxide Sulphate | 96 Hours | Algae | EC50 | 0,3 mg/L |
| Dipotassium hexafluorozirconate | 96 Hours | Fish | LC50 | 172,4 mg/L |
| Dipotassium hexafluorozirconate | 48 Hours | Daphnia | EC50 | 151,4 mg/L |
| Dipotassium hexafluorozirconate | 72 Hours | Algae | EC50 | 1,03 mg/L |

12.2. Persistence and degradability

Substance Biodegradability Test Result

No data. - -

12.3. Bioaccumulative potential

Substance Potential LogPow

bioaccumulation

No data. - -

12.4. Mobility in soil

Test data are not available.

12.5. Results of PBT and vPvB assessment

The product does not meet the criteria for PBT or vPvB.

12.6. Endocrine disrupting properties

Test data are not available.

12.7. Other adverse effects

Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The product is covered by the regulations on dangerous waste.

Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.

| EWC-Code | Description |
|----------|--|
| 11 01 98 | Other wastes containing hazardous substances |

Specific labelling:

Contaminated packaging:

Empty packaging and residues must be disposed of through the municipal waste collection service for hazardous waste.

SECTION 14: Transport information

The product is not covered by the rules for transport of dangerous goods by road and sea according to ADR, IMDG and IATA.

14.1 -14.4.

ADR

IMDG/IATA

-

14.5. Environmental hazards

-

14.6. Special precautions for user

14.7. Maritime transport in bulk according to IMO instruments

Not relevant.

SECTION 15: Regulatory information

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

Commission Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, EU 2017/164 and EU 2019/1831 (the first, second, third, fourth and fifth IOELV Directives).

Additional labelling:

Restrictions for application:

Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product. Young people above 15 years are exempted this rule, if the product is a part of an education/training.

Demands for specific education:

15.2. Chemical safety assessment

None.

SECTION 16: Other information

According to EU regulation 1907/2006 (REACH)

Other information:

Sources:

EC regulation 1907/2006 (REACH), with amendments. EC Regulation 1272/2008 (CLP), with amendments. EU regulation no. 276/2010

Directive 2008/98/EC

ECHA - The European Chemicals Agency

Full text of H-phrases as mentioned in section 2+3:

Toxic if swallowed. H302 Harmful if swallowed. H315 Causes skin irritation.

May cause an allergic skin reaction. H317 H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

Harmful to aquatic life with long lasting effects. H412

Classification according to Regulation (EC) Nr. 1272/2008:

Acute Tox. 4;H302 Calculation method Skin Irrit. 2;H315 Calculation method Skin Sens. 1;H317 Calculation method Eye Dam. 1;H318 Calculation method Aquatic Chronic 3;H412 Calculation method

Abbreviations and acronyms used in the safety data sheet:

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals. Regulation (EC) No 1907/2006.

CLP: Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.

CAS-Number.: Chemical Abstracts Service number.

EC-Number.: EINECS and ELINCS Number (see also EINECS and ELINCS).

DNEL: Derived No Effect Level.

PNEC(s): Predicted No Effect Concentration(s).

STOT: Specific Target Organ Toxicity.

LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).

LC50: Lethal Concentration to 50 % of a test population.

EC50: The effective concentration of substance that causes 50% of the maximum response.

PBT: Persistent, Bioaccumulative and Toxic.

vPvB: Very Persistent and Very Bioaccumulative.

NOEC: The highest tested concentration at which, in a study, no statistically significant effect is observed in the exposed population compared with an appropriate control group.

NOAEL: The highest tested dose or exposure level at which there are no statistically significant increases in the frequency or severity of adverse effects between the exposed population and an appropriate control group; some effects may be produced at this level, but they are not considered adverse or precursors of adverse effects.

Other:

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

Minor changes have been made in following sections:

New supplier information.

This material safety data sheet replaces version:

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