

SAFETY DATA SHEET

Safety Data Sheet according to (EC) No. 1907/2006 (REACH).

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

1.1. Product identifier:

CHROMATECH ULTRA F

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

Metal alloy.

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

Rolltech A/S Tel: + 45 96 23 33 43

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Denmark

Responsible person for the safety data sheet (e-mail): info@rolltech.dk

1.4. Emergency telephone number:

+ 45 96 23 33 43 (Office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:

According to Directive 1999/45/EC and Regulation 1272/2008 (CLP) the metal alloy does not require a classification. This Safety Data Sheet is intended as a service to customers/users of the metal alloy.

2.2. Label elements:

None.

2.3. Other hazards: The material itself does not constitute any health risk, but prolonged or frequent skin contact may cause sensitization (allergy) and careless handling may cause skin abrasion.

Dust from machining (e.g. milling, drilling or sawing) may constitute a health risks - see SECTION 8.

PBT/vPvB: No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures:

Product description: Metal alloy of Iron(III) oxide (CAS-no. 1309-37-1).

Components contributing to the hazard:

Chromium (CAS-Nr. 7440-47-3), 1-10 %w/w

Nickel (CAS-Nr. 7440-02-0), 0.1-1 %w/w

Manganese (CAS-Nr. 7439-96-5), 1-5 %w/w

4,4'-Diphenylmethan diisocyanate (MDI) (CAS-Nr. 101-68-8), < 0,1 %w/w

SECTION 4: First aid measures (if user is exposed to dust from machining)

4.1. Description of first aid measures:

Symptomatic treatment.

Inhalation: Move user to fresh air. Keep under surveillance. If needed: Seek medical advice.

Skin contact: Dust can irritate the skin, making it more sensitive to chemicals. Remove clothes contaminated with dust.

First rinse the skin with plenty of water and then wash the skin with soap and water.

Eye contact: Flush eyes well with copious quantities of water or normal saline. If irritation persists: Seek medical advice.

Ingestion: Not relevant.

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

Inhalation of large amounts of machining dust may cause acute respiratory problems such as asthma. Prolonged or frequent inhalation of dust may cause respiratory problems and cancer (Chromium oxides and Nickel oxides). Prolonged or frequent skin contact exposure may cause sensitization (allergy).

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

Show this Safety Data Sheet to a physician or emergency ward.

SECTION 5: Firefighting measures

5.1. Extinguishing media:

Not flammable. Against surrounding fire: Water preferred, foam may be used.

5.2. Special hazards arising from the substance or mixture:

Do not breathe smoke gasses: Metal oxides and toxic metal fumes.

5.3. Advice for firefighters:

When entering burning area: Wear self contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Not relevant.

6.2. Environmental precautions:

Not relevant.

6.3. Methods and material for containment and cleaning up:

Dampen dust with water. Then transfer material to a suitable container.

6.4. Reference to other sections:

Not relevant.

SECTION 7: Handling and storage

7.1. Precautions for safe handling:

Avoid inhalation of dust and fumes. Maintain sufficient local exhaust and ventilation when machining. Ventilated air should not be recycled.

7.2. Conditions for safe storage, including any incompatibilities:

Clean and dry.

7.3. Specific end use(s):

See SECTION 1

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters:

Occupational exposure limits: Comply with national and local regulations for dust exposure.

Dust exposure limits (general): Inhalable dust: 10 mg/m³ (8-hr. TWA); Respirable dust: 4 mg/m³ (8-hr. TWA)Chromium: 0.5 mg/m³ (8-hr. TWA); Chromium (VI) compounds (as Cr): 0.05 mg/m³ (8-hr. TWA)Iron oxide, fume (as Fe): 5 mg/m³ (8-hr. TWA); 10 mg/m³ (15 min. STEL)Nickel and its inorganic compounds (water- insoluble nickel compounds (as Ni)): 0.5 mg/m³ (8-hr. TWA)Manganese and its inorganic compounds (as Mn): 0.5 mg/m³ (8-hr. TWA)Isocyanates, all (as -NCO): 0.02 mg/m³ (8-hr. TWA); 0.07 mg/m³ (15 min. STEL)

Biological monitoring guidance value: Chromium (VI): 10 µmol chromium/mol creatinine in urine

DNEL/PNEC: No CSR.

8.2. Exposure controls:

Personal protective equipment:

Inhalation: If the local exhaust ventilation is insufficient when machining: Use an approved mask with a particle filter: Type P3 (EN140). The filter has a limited lifetime and must be changed. Read the instruction.

Skin: Protective work clothes. Exposed skin may require protection owing to irritation and eczema caused by particles.

Eyes: When machining, protect eyes from dust with safety goggles (EN166).

Environmental exposure controls: None particular.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

Appearance:	Solid.
Odour:	Odourless
Odour threshold:	No available data
pH:	Not applicable
Melting point / freezing point (°C):	1500
Initial boiling point and boiling range (°C):	Not applicable
Decomposition temperature (°C):	No available data
Flash point (°C):	> 200
Evaporation rate:	Not applicable
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits (vol-%):	Not applicable
Vapour pressure (bar, 20°C):	Not applicable
Vapour density (air=1):	Not applicable
Relative density (g/cm ³ , 20°C):	7.7 – 7.8
Solubility:	Not soluble
Partition coefficient: n-octanol/water, Log K _{ow} :	Not soluble in n-octanol or water
Auto-ignition temperature (°C):	Not applicable
Viscosity:	Not applicable
Explosive/oxidising properties:	Not applicable
9.2. Other information:	None relevant

SECTION 10: Stability and reactivity

10.1. Reactivity:

Chemically inert. Does not attack other materials.

10.2. Chemical stability:

See SECTION 10.1.

10.3. Possibility of hazardous reactions:

See SECTION 10.1.

10.4. Conditions to avoid:

Humidity.

Dust explosion hazard: None.

10.5. Incompatible materials:

None.

10.6. Hazardous decomposition products:

See SECTION 5. By extensive heating (thermal decomposition) the alloy may form metal oxide (Chromium oxide and Nickel oxide).

SECTION 11: Toxicological information (when machining)

11.1. Information on toxicological effects:

Information on likely routes of exposure: May be absorbed by inhalation (lungs).

Synergistic products: Tobacco smoke may enhance the effects of inhalation of machining dust.

Symptoms:

Inhalation: Inhalation of large amounts of machining dust may cause acute respiratory problems such as asthma.

Skin: Dust is a contact irritant.

Eyes: Dust is a contact irritant.

Ingestion: Not relevant.

Chronic effects: Prolonged or frequent inhalation of dust may cause respiratory problems and cancer (Chromium oxide and Nickel oxide). Prolonged or frequent skin contact exposure may cause sensitization (allergy), especially Nickel allergy.

SECTION 12: Ecological information

12.1. Toxicity:

Contains small amounts of Chromium oxide, which is very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability:

Not relevant.

12.3. Bioaccumulative potential:

Not relevant.

12.4. Mobility in soil:

Not relevant.

12.5. Results of PBT and vPvB assessment:

Not relevant.

12.6. Other adverse effects:

Not relevant.

SECTION 13: Disposal considerations

13.1. Waste treatment methods:

Comply with national and local regulations for inert waste.

EWC-Code: 11 01 99 (wastes not otherwise specified)

SECTION 14: Transport information

Not dangerous goods according to ADR/RID.

14.1. UN-no.: None.

14.2. UN proper shipping name: None.

14.3. Transport hazard class(es): None.

14.4. Packing group: None.

14.5. Environmental hazards: None.

14.6. Special precautions for user: None.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not relevant.

SECTION 15: Regulatory information

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

None.

15.2. Chemical Safety Assessment:

No CSR

SECTION 16: Other information

Abbreviations:

CMR = Carcinogenicity, mutagenicity og reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

EC₅₀ = Effect Concentration 50 %

ECB = European Chemicals Bureau.

ECHA = European Chemicals Agency

FW = Fresh Water

LC₅₀ = Lethal Concentration 50 %

LD₅₀ = Lethal Dose 50 %

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

Special references used:

IARC = International Agency for Research on Cancer

Training advice:

No special training is required. However, the user should be well instructed in the execution of the task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

Other information:

None.

Changes since the previous edition:

Not relevant.

Note:

Information contained herein, while accurate to the best of our knowledge, is intended as a health and safety guide and should not be construed as a warranty for any specific properties. However, as conditions of handling and use of this alloy are beyond our control, we can accept no liability for damages incurred by the use of this material.

It is the responsibility of the user to comply with all applicable local and national laws and regulations, and nothing contained herein is to be construed as a recommendation for use in violation of any patents or of applicable laws or regulations.

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