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SDS version 1.1

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

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### 1.1. Product Identifier

Trade Name: CHROMATECH ultra F2  
Product- no.: -

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

**Recommended uses:**

Warm edge spacer of hard plastic and stainless steel.

**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:**

ALU PRO S.r.l.  
Via A. Einstein, 8  
30033 Noale (VE)  
Italy  
Tel.: +39 041 5897311

**Contact person and E-mail:**

alupro@alupro.it

**The Safety data sheet is completed and validated by:**

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

### 1.4. Emergency telephone number

NHS: 111

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

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## SECTION 2: Hazards identification

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### 2.1. Classification of the substance or mixture

The product is not subject to labelling under CLP Regulation No. 1272/2008.

### 2.2. Label elements

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**Signal word:**

-

### 2.3. Other hazards

-

**Additional labelling:**

-

**Additional warnings**

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

### 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
<b>Stainless steel</b>	- / -	-	-	-	100	1
Iron	- / -	7439-89-6	231-096-4	-	10 - 100	1
Chrom	- / -	7440-47-3	231-157-5	-	1 - 10	1
Nickel	028-002-01-4 / -	7440-02-0	231-111-4	Skin Sens. 1; H317, Carc. 2; H351, STOT RE 1; H372, Aquatic Chronic 3; H412	0,1 - 1	1
Mangane	- / -	7439-96-5	231-105-1	-	1 - 5	1
4,4'- Methylenediphenyl diisocyanate (MDI)	615-005-00-9 / 01- 2119457014-47- xxxx	101-68-8	202-966-0	Skin Irrit. 2; H315, Skin Sens. 1; H317, Eye Irrit. 2; H319, Acute Tox. 4; H332, Resp. Sens. 1; H334, STOT SE 3; H335, Carc. 2; H351, STOT RE 2; H373	< 0,1	1
<b>Hard plastic</b>	- / -	-	-	-	100	1
Polypropylene - homopolymer	- / -	-	-	-	> 20	1

1) The product is made of stainless steel and hard plastic. Fully cured.

See full text of H-phrases in section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

**Inhalation:**

Not relevant.

**Ingestion:**

Not relevant.

**Skin contact:**

Wash skin with soap and water.

Seek medical advice in case of persistent discomfort.

**Eye contact:**

Flush with water (preferably using eye wash equipment) until irritation subsides. Seek medical advice if symptoms persist.

**Additional information:**

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

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

No irritation anticipated when used normally.

#### 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.

Exposure to decomposition products may cause a health hazard.

#### 5.3. Advice for firefighters

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.

### 6.2. Environmental precautions

Not relevant.

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

Sweep up/collect spills for possible reuse or transfer to suitable waste containers.

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.

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

There are no special requirements for storage. However, it should be stored safe and out of the reach of children.

### 7.3. Specific end use(s)

See application section 1.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Occupational exposure limits according to EH40/2005 Workplace exposure limits (Fourth Edition 2020):

-

#### DNEL/PNEC-values:

##### DNEL Iron

	Workers	Consumers
Inhalation - Chronic Local	3 mg/m <sup>3</sup>	1.5 mg/m <sup>3</sup>
Oral - Chronic Systemic	-	0.71 mg/kg bw/day

##### DNEL Chrom

	Workers	Consumers
Inhalation - Chronic Local	0.5 mg/m <sup>3</sup>	0.027 mg/m <sup>3</sup>

##### DNEL Nikkel

	Workers	Consumers
Inhalation - Chronic Systemic	0.05 mg/m <sup>3</sup>	60 ng/m <sup>3</sup>
Inhalation - Chronic Local	0.05 mg/m <sup>3</sup>	60 ng/m <sup>3</sup>
Inhalation - Acute Local	11.9 mg/m <sup>3</sup>	0.8 mg/m <sup>3</sup>
Dermal - Acute Systemic	-	0.035 mg/cm <sup>2</sup>
Dermal - Chronic Local	0.035 mg/cm <sup>2</sup>	-
Oral - Chronic Systemic	-	0.011 mg/kg bw/day
Oral - Acute Systemic	-	0.37 mg/kg bw/day

##### DNEL Mangane

	Workers	Consumers
Inhalation - Chronic Systemic	0.2 mg/m <sup>3</sup>	0.041 mg/m <sup>3</sup>
Inhalation - Chronic Local	-	0.041 mg/m <sup>3</sup>
Dermal - Chronic Systemic	0.004 mg/kg bw/day	0.002 mg/kg bw/day

##### DNEL 4,4'-Methylenediphenyl diisocyanate (MDI)

	Workers	Consumers
Inhalation - Chronic Local	0.05 mg/m <sup>3</sup>	0.025 mg/m <sup>3</sup>
Inhalation - Acute Local	0.1 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>

## PNEC Chrom

Fresh water	6.5 µg/L
Soil	21.1 mg/kg soil dw

## PNEC Nikkel

Fresh water	7.1 µg/L
Marine water	8.6 µg/L
Soil	29.9 mg/kg soil dw

## PNEC Manganese

Fresh water	0.034 mg/L
Intermittent releases (Fresh water)	0.028 mg/L
Marine water	0.003 mg/L
Soil	3.4 mg/kg soil dw

## PNEC 4,4'-Methylenediphenyl diisocyanate (MDI)

Fresh water	3.7 µg/L
Intermittent releases (Fresh water)	37 µg/L
Marine water	0.37 µg/L
Soil	2.33 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.

### Respiratory protection:

Generally not required.

In case of insufficient ventilation during handling (welding, cutting, grinding, heating) wear respiratory protective equipment with filter P2.

### Hand protection:

Plastic or rubber gloves recommended.

### Eye/face protection:

Generally not required.

Recommended:

Wear safety goggles if there is a risk of dust contact with eyes.

### Skin protection:

No special requirements.

### 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:	-
Odour:	Odourless
Melting point/ Freezing Point (°C):	1500
Boiling point or initial boiling point and boiling range (°C):	-
Flammability:	-
Lower and upper explosion limit (vol-%):	-
Flash point (°C):	>200
Auto-ignition temperature (°C):	-
Decomposition temperature (°C):	-
pH:	-
Kinematic viscosity (mm <sup>2</sup> /s):	-
Solubility:	Not soluble in water
Partition coefficient n-octanol/water (log value)	-
Vapour pressure:	-
Density and/or relative density:	7.7 - 7.8 g/cm <sup>3</sup> , 20 °C
Relative vapour density:	-
Particle characteristics:	-

### 9.2. Other information

None.

## 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

None known.

### 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:

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

Substance	exposure	Species	Test	Result
Iron	Oral	Rat	LD50	98,6 g/kg bw
Chrom	Oral	Rat	LD50	> 5000 mg/kg bw
Chrom	Inhalation	Rat	LC50/ 4 Hours	5.41 mg/L air
Nickel	Oral	Rat	LD50	>9000 mg/kg bw
Mangane	Oral	Rat	LD50	> 2000 mg/kg bw
Mangane	Inhalation	Rat	LC50/ 4 Hours	5.14 mg/L air
4,4'-Methylenediphenyl diisocyanate (MDI)	Oral	Rat	LD50	> 2000 mg/kg bw
4,4'-Methylenediphenyl diisocyanate (MDI)	Inhalation	Rat	LC50/ 4 Hours	367.95 mg/m <sup>3</sup> air
4,4'-Methylenediphenyl diisocyanate (MDI)	Dermal	Rabbit	LD50	> 9400 mg/kg bw

#### Skin corrosion/irritation:

Skin irritation is not anticipated when used normally.

#### Serious eye damage/irritation:

May cause mechanical irritation.

#### Respiratory or skin sensitisation:

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

#### 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.

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**SECTION 12: Ecological information**

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**12.1. Toxicity**

Substance	Test duration	Species	Test	Result
Nickel	96 Hours	Fish	LC50	15.3 mg/L
Nickel	48 Hours	Daphnia	LC50	74.4 µg/L
Nickel	72 Hours	Algae	EC50	81.5 - < 148 µg/L
Mangane	96 Hours	Fish	LC50	> 3.6 mg/L
Mangane	48 Hours	Daphnia	EC50	> 1.6 mg/L
Mangane	72 Hours	Algae	EC50	4.5 mg/L

**12.2. Persistence and degradability**

Substance	Biodegradability	Test	Result
4,4'-Methylenediphenyl diisocyanate (MDI)	No	OECD Guideline 301 F	28 Days 0%

**12.3. Bioaccumulative potential**

Substance	Potential bioaccumulation	LogPow
4,4'-Methylenediphenyl diisocyanate (MDI)	Yes	4.51

**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**

None.

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**SECTION 13: Disposal considerations**

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**13.1. Waste treatment methods**

The product is not classified as hazardous waste according to Waste Management. Disposal of spillage and waste via the municipal waste collection service with the specifications below is recommended.

EWC-Code	Description
11 01 99	Wastes not otherwise specified

**Specific labelling:**

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**Contaminated packaging:**

Uncleansed packaging is to be disposed of via the local waste-removal scheme.

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**SECTION 14: Transport information**

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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**

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**IMDG/IATA**

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## 14.5. Environmental hazards

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## 14.6. Special precautions for user

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## 14.7. Maritime transport in bulk according to IMO instruments

Not relevant.

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## SECTION 15: Regulatory information

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

#### **Sources:**

EH40/2005 Workplace exposure limits (Fourth Edition 2020).

#### **Additional labelling:**

-

#### **Restrictions for application:**

-

#### **Demands for specific education:**

-

### 15.2. Chemical safety assessment

None.

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## SECTION 16: Other information

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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:**

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

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

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#### **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.

# Material Safety Data Sheet **ALU<sup>®</sup>PRO**

***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:***

General update.

***This material safety data sheet replaces version:***

1.0