Safety data sheet
according to 1907/2006/EC, Article 31

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

· **1.1 Product identifier**

· **Trade name: Alphalot Au-Cr**

· **Article number:** 629020, 629021
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the mixture** Brazing alloy

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Schütz Dental GmbH, Dieselstrasse 5-6, D-61191 Rosbach v.d.H. (Germany)
Tel.: +49 (0)6003/814-0 Fax: +49 (0)6003/814-906
www.schuetz-dental.de; e-mail: info@schuetz-dental.de

· **Further information obtainable from:** Tel.: +49 (0)6003/814-630
· **1.4 Emergency telephone number:**
+49 (0) 6003 8140 Schütz Dental (8:00 - 17:00 Uhr) or
+49 (0) 6131 19240 Poison Information Center, University Mainz (24 h)

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SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

Skin Corr. 1B	H314 Causes severe skin burns and eye damage.
Eye Dam. 1	H318 Causes serious eye damage.
Skin Sens. 1	H317 May cause an allergic skin reaction.
Carc. 2	H351 Suspected of causing cancer. Route of exposure: Inhalation.
STOT RE 1	H372 Causes damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.
Aquatic Chronic 2	H411 Toxic to aquatic life with long lasting effects.

· **Additional information:**
In its quality as a compact metal, this product is not subject to any labelling obligation due to the calculation method of the "General Classification Guideline for Preparations of the EU" as issued in the latest valid version.
The following labelling does not apply to the alloy, but to possible vapors, fumes and gases that may be produced during processing.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the GB CLP regulation.
· **Hazard pictograms**

GHS05 GHS07 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components of labelling:**
nickel
potassium bifluoride
· **Hazard statements**
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer. Route of exposure: Inhalation.
H372 Causes damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.
H411 Toxic to aquatic life with long lasting effects.

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· **Precautionary statements**
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Metal alloy

· **Dangerous components:**		
CAS: 7440-02-0 EINECS: 231-111-4	nickel Carc. 2, H351; STOT RE 1, H372; Skin Sens. 1, H317	10-25%
CAS: 7440-66-6 EINECS: 231-175-3	zinc powder -zinc dust (pyrophoric) Pyr. Sol. 1, H250; Water-react. 1, H260; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	2.5-10%
CAS: 7789-29-9 EINECS: 232-156-2	potassium bifluoride Acute Tox. 3, H301; Skin Corr. 1B, H314 Specific concentration limits: Skin Corr. 1B; H314: C ≥ 1 % Skin Irrit. 2; H315: 0.1 % ≤ C < 1 % Eye Irrit. 2; H319: 0.1 % ≤ C < 1 %	<2.5%
CAS: 10043-35-3 EINECS: 233-139-2	boric acid Repr. 1B, H360FD Specific concentration limit: Repr. 1B; H360: C ≥ 5.5 %	<2.5%

· **SVHC**	
10043-35-3	boric acid

· **Additional information** For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information** No special measures required.
· **After inhalation**
Supply fresh air.
Rinse nose and throat thoroughly with water.
Seek medical treatment in case of complaints.
· **After skin contact**
Immediately rinse with water.
If skin irritation continues, consult a doctor.
· **After eye contact**
Protect unharmed eye.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing** Do not induce vomiting; call for medical help immediately.
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

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· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents** Special powder for metal fires. Do not use water.
· **For safety reasons unsuitable extinguishing agents** Water.
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:** No special measures required.

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SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Avoid formation of dust.
Use respiratory protective device against the effects of fumes/dust/aerosol.
· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Avoid the development of dust, while collecting the sticks.
Send for recovery or disposal in suitable receptacles.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Extractors are required on all machines used for thermal processing or splinter removal processes.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Store in dry conditions.
· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
7440-02-0 nickel	
WEL	Long-term value: 0.5 mg/m³ as Ni; Sk; Carc
7789-29-9 potassium bifluoride	
WEL	Long-term value: 2.5 mg/m³ as F

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Appropriate engineering controls** No further data; see item 7.

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· **Individual protection measures, such as personal protective equipment**
· **General protective and hygienic measures**
Do not eat, drink, smoke or sniff while working.
Do not inhale dust / smoke / mist.
· **Respiratory protection:**
Not necessary if room is well-ventilated.
Use suitable respiratory protective device when high concentrations are present.
Short term filter device:
Filter P2.
· **Hand protection** Protective gloves.
· **Material of gloves** Natural rubber, NR
· **Penetration time of glove material**
0,1 - 0,2 mm
Penetration time: 5 min.
· **Eye/face protection** Safety glasses

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SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Physical state**	Solid.
· **Colour:**	White
· **Odour:**	Odourless
· **Odour threshold:**	Not determined.
· **Melting point/freezing point:**	865-930 °C
· **Boiling point or initial boiling point and boiling range**	undetermined
· **Flammability**	Not determined.
· **Lower and upper explosion limit**	
· **Lower:**	Not determined.
· **Upper:**	Not determined.
· **Flash point:**	Not applicable
· **Decomposition temperature:**	Not determined.
· **pH**	Not applicable.
· **Viscosity:**	
· **Kinematic viscosity**	Not applicable.
· **dynamic:**	Not applicable.
· **Solubility**	
· **Water:**	Not determined
· **Partition coefficient n-octanol/water (log value)**	Not determined.
· **Vapour pressure:**	Not applicable.
· **Density and/or relative density**	
· **Density at 20 °C:**	15.8 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not applicable.

· **9.2 Other information**	
· **Appearance:**	
· **Form:**	tubes
· **Important information on protection of health and environment, and on safety.**	
· **Auto-ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Solvent content:**	
· **Organic solvents:**	0.0 %
· **Change in condition**	
· **Evaporation rate**	Not applicable.

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· **Information with regard to physical hazard classes**	
· **Explosives**	Void
· **Flammable gases**	Void
· **Aerosols**	Void
· **Oxidising gases**	Void
· **Gases under pressure**	Void
· **Flammable liquids**	Void
· **Flammable solids**	Void
· **Self-reactive substances and mixtures**	Void
· **Pyrophoric liquids**	Void
· **Pyrophoric solids**	Void
· **Self-heating substances and mixtures**	Void
· **Substances and mixtures, which emit flammable gases in contact with water**	Void
· **Oxidising liquids**	Void
· **Oxidising solids**	Void
· **Organic peroxides**	Void
· **Corrosive to metals**	Void
· **Desensitised explosives**	Void

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known

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SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· **Skin corrosion/irritation** Causes severe skin burns and eye damage.
· **Serious eye damage/irritation** Causes serious eye damage.
· **Respiratory or skin sensitisation**
Nickeloxide (dust) may cause cancer by inhalation.
May cause an allergic skin reaction.
· **Carcinogenicity** Suspected of causing cancer. Route of exposure: Inhalation.
· **STOT-repeated exposure**
Causes damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.
· **Additional toxicological information:** Avoid inhalation of grinding dust.
· **11.2 Information on other hazards**

· **Endocrine disrupting properties**
None of the ingredients is listed.

SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.

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· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
· **12.7 Other adverse effects**
· **Additional ecological information:**
· **General notes:**
Not known to be hazardous to water.
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

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SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation** Contact waste processors for recycling information.

· **Uncleaned packaging:**
· **Recommendation:**
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

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SECTION 14: Transport information

· **14.1 UN number or ID number**	
· **ADR, IMDG, IATA**	Void
· **14.2 UN proper shipping name**	
· **ADR, IMDG, IATA**	Void
· **14.3 Transport hazard class(es)**	
· **ADR, ADN, IMDG, IATA**	
· **Class**	Void
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	Void
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
· **Transport/Additional information:**	Not dangerous according to the above specifications.
· **UN "Model Regulation":**	Void

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SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **Seveso category** E2 Hazardous to the Aquatic Environment
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

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· **National regulations**

· **Technical instructions (air):**

Class	Share in %
II	< 2,5
III	< 2,5

· **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

· **Substances of very high concern (SVHC) according to UK REACH**

10043-35-3	boric acid

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

*
SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H250 Catches fire spontaneously if exposed to air.
H260 In contact with water releases flammable gases which may ignite spontaneously.
H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H360FD May damage fertility. May damage the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

· **Department issuing SDS:** Schütz Dental GmbH
· **Contact:** Dr. U. Krichbaum
· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international 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 Harmonised 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 (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Pyr. Sol. 1: Pyrophoric solids – Category 1
Water-react. 1: Substances and mixtures which in contact with water emit flammable gases – Category 1
Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
Repr. 1B: Reproductive toxicity – Category 1B
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· *** Data compared to the previous version altered.**