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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revised on / Version: 20.04.2011 / 0001
Replaces revision of / Version: 20.04.2011 / 0001
Valid from: 20.04.2011
PDF print date: 14.07.2011
Ag-Cu-P

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

Ag-Cu-P

BrazeTec S 18
BrazeTec S 15
BrazeTec S 15 B GOE
BrazeTec S 6
BrazeTec S 5
BrazeTec S 5F
BrazeTec S 5T
BrazeTec S 2
BrazeTec S 2AS
BrazeTec S 2 JU
BrazeTec S 2V
BrazeTec S 2X
BrazeTec S 1
BrazeTec S 06
BrazeTec S 05
BrazeTec S 02

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

Relevant identified uses of the substance or mixture:

Brazing alloy

Sector of use [SU]:

SU10 - Formulation (mixing) of preparations and/or re-packaging (excluding alloys)

SU15 - Manufacture of fabricated metal products, except machinery and equipment

Chemical product category [PC]:

PC38 - Welding and soldering products (with flux coatings or flux cores.), flux products

Process category [PROC]:

PROC 5 - Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)

PROC14 - Production of preparations or articles by tableting, compression, extrusion, pelletisation

PROC23 - Open processing and transfer operations with minerals/metals at elevated temperature

PROC25 - Other hot work operations with metals

Environmental Release Category [ERC]:

ERC 2 - Formulation of preparations

ERC 5 - Industrial use resulting in inclusion into or onto a matrix

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

Umicore AG&Co.KG, Business Unit Technical Materials, BusinessLine BrazeTec, Rodenbacher Chaussee 4, D-63457 Hanau-Wolfgang

Telephone +49 (6181) 59-02, Fax +49 (6181) 59-3107

www.BrazeTec.com info@BrazeTec.de

E-mail address of the competent person: info@chemical-check.de, k.schnurbusch@chemical-check.de

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1.4 Emergency telephone

Advisory office in case of poisoning:

+49 30 19240 (D-13437 Berlin, 24 hour)

Telephone number of the company in case of emergencies:

Tel.: Europe, Central- and South America, Israel and Africa : +32 3 213 15 70

Middle East (Israel excluded) and Arabic speaking Africa: +32 3 213 33 79

USA & Canada: 1-877 986 4267

ASIA (China excluded): +65 62 64 78 36

CHINA: 400 88 71 190

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP)

Not determined

2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments).

The mixture is not classified as dangerous in the terms of the directive 1999/45/EC.

2.2 Label elements

2.2.1 Labeling according to Regulation (EC) 1272/2008 (CLP)

Not determined

2.2.2 Labeling according to Directives 67/548/EEC and 1999/45/EC (including amendments).

Symbols: Not applicable

Indications of danger: ---

R-phrases:

S-phrases:

Additions:

Safety data sheet available for professional user on request.

2.3 Other hazards

The mixture contains no vPvB substance (vPvB = very persistent, very bioaccumulative).

The mixture contains no PBT substance (PBT = persistent, bioaccumulative, toxic).

In the event of contact with the hot product:

Danger of burns

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a.

3.2 Mixture

Copper	
Registration number (ECHA)	-
Index	---
EINECS, ELINCS	231-159-6
CAS	CAS 7440-50-8
content %	79-94
Symbol	---
R-phrases	---
Classification categories / Indications of danger	---
Hazard class/Hazard category	Hazard statement

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Silver	Substance for which an EU exposure limit value applies.
Registration number (ECHA)	-
Index	---
EINECS, ELINCS	231-131-3
CAS	CAS 7440-22-4
content %	0,1-19
Symbol	---
R-phrases	---
Classification categories / Indications of danger	---
Hazard class/Hazard category	Hazard statement

For the text of the R-phrases / H-phrases and classification codes (GHS/CLP), see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

During processing:
 Remove person from danger area.
 Supply person with fresh air and consult doctor according to symptoms.

Skin contact

In the event of contact with the hot product:
 Wash off with cold water.
 Do not attempt to remove hardened product.

Eye contact

In the event of contact with the hot product:
 Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

n.a.

4.2 Most important symptoms and effects, both acute and delayed

Where relevant delayed occurring symptoms and effects will be found in section 11. or at the exposure routes under section 4.1.
 Hazardous gasses are set free when processing product.

4.3 Indication of any immediate medical attention and special treatment needed

n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Adapt to the nature and extent of fire.
 If applicable
 Metal fire extinguisher

Unsuitable extinguishing media

n.c.

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:
 Fume
 Irritating gases
 Oxides of phosphorus
 Copper oxides

5.3 Advice for firefighters

Protective respirator with independent air supply.
 According to size of fire
 Full protection, if necessary
 Dispose of contaminated extinction water according to official regulations.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No special measures required.

6.2 Environmental precautions

Prevent from entering drainage system.

6.3 Methods and material for containment and cleaning up

Pick up mechanically and dispose of according to Section 13.

Allow the hot product to solidify.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

Suction measures at the workplace or on the processing machines required.

Do not inhale dust/fume/mist.

Observe directions on label and instructions for use.

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Store product closed and only in original packing.

Not to be stored in gangways or stair wells.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

GB	Chemical Name	Copper	Content %:79-94
	WEL-TWA:	1 mg/m ³ (dusts and mists, as Cu)	WEL-STEL: 2 mg/m ³ (dusts and mists, as Cu) ---
	BMGV:	---	Other information: ---

IRL	Chemical Name	Copper	Content %:79-94
	WEL-TWA:	1 mg/m ³ (dusts and mists, as Cu)	WEL-STEL: 2 mg/m ³ (dusts and mists, as Cu) ---
	BMGV:	---	Other information: ---

GB	Chemical Name	Silver	Content %:0,1-19
	WEL-TWA:	0,1 mg/m ³ (metallic) (WEL, EC)	WEL-STEL: --- ---
	BMGV:	---	Other information: ---

IRL	Chemical Name	Silver	Content %:0,1-19
	WEL-TWA:	0,1 mg/m ³ (metallic) (WEL, EC)	WEL-STEL: --- ---
	BMGV:	---	Other information: ---

GB WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through

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skin. Carc = Capable of causing cancer and/or heritable genetic damage.
 ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

IRL OELV-8h = Occupational Exposure Limit Value (8-hour reference period) | OELV-15min = Occupational Exposure Limit Value (15-minute reference period) | BLV = Biological limit value | Other information: C1, C2 = carcinogenic substance, Cat. 1 or 2. Mut 1, 2 = mutagenic substance, Cat. 1 or 2. Repro 1, 2 = Substances known to be toxic for reproduction, Cat. 1 or 2. Sk = can be absorbed through skin. Asphyx = asphyxiant. Sen = Respiratory sensitizer.
 ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
 If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
 Applies only if maximum permissible exposure values are listed here.

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
 Wash hands before breaks and at end of work.
 Keep away from food, drink and animal feedingstuffs.
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection: Normally not necessary.
 During processing:
 Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection: Normally not necessary.
 During processing:
 Leather gloves

Skin protection - Other: Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)

Respiratory protection: Normally not necessary.
 During processing:
 Filter P 2 EN 143

Thermal hazards:
 If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).

Additional information on hand protection - No tests have been performed.
 In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
 Selection of materials derived from glove manufacturer's indications.
 Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
 Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
 In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
 The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Solid
Colour:	Red
Odour:	Odourless
Odour threshold:	Not determined
pH-value:	Not determined
Melting point/freezing point:	650-875 °C

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Initial boiling point and boiling range:	Not determined
Flash point:	Not determined
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	8,1-8,4 g/cm ³
Bulk density:	Not determined
Solubility(ies):	Not determined
Water solubility:	Not determined
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Not determined
Oxidising properties:	Not determined

9.2 Other information

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

See also Subsection 10.4 to 10.6.
The product has not been tested.

10.2 Chemical stability

See also Subsection 10.4 to 10.6.
Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

See also Subsection 10.4 to 10.6.

10.4 Conditions to avoid

See also section 7.
Strong heat

10.5 Incompatible materials

See also section 7.
Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

See also Subsection 10.4 to 10.6.
See also section 5.2

SECTION 11: Toxicological information

No classification according to calculation procedure.

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Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.

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Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Respiratory tract irritation:						n.d.a.
Repeated dose toxicity:						n.d.a.
Symptoms:						n.d.a.

Copper						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:						Not irritant
Respiratory or skin sensitisation:						Not sensitizing
Symptoms:						abdominal pain, vomiting, weight loss, headaches, metal fume fever

Silver						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit		Not irritant

SECTION 12: Ecological information

Ag-Cu-P							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:							n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and degradability:							n.d.a.
Bioaccumulative potential:							n.d.a.
Mobility in soil:							n.d.a.
Results of PBT and vPvB assessment							n.d.a.
Other adverse effects:							n.d.a.

SECTION 13: Disposal considerations

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13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.
 Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC)

12 01 04 non-ferrous metal dust and particles

17 04 07 mixed metals

Recommendation:

Pay attention to local and national official regulations

E.g. dispose at suitable refuse site.

Implement substance recycling.

For contaminated packing material

Pay attention to local and national official regulations

SECTION 14: Transport information

General statements

UN number: n.a.

Transport by road/by rail (ADR/RID)

UN proper shipping name:

Transport hazard class(es): n.a.

Packing group: n.a.

Classification code: n.a.

LQ (ADR 2011): n.a.

LQ (ADR 2009): n.a.

Environmental hazards: Not applicable

Tunnel restriction code:

Transport by sea (IMDG-code)

UN proper shipping name:

Transport hazard class(es): n.a.

Packing group: n.a.

n.a.

Marine Pollutant: n.a.

Environmental hazards: Not applicable

Transport by air (IATA)

UN proper shipping name:

Transport hazard class(es): n.a.

Packing group: n.a.

Environmental hazards: Not applicable

Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Non-dangerous material according to Transport Regulations.

Additional information:

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

For classification and labelling see Section 2.

Observe restrictions: Yes

15.2 Chemical safety assessment

No information available at present.

SECTION 16: Other information

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These details refer to the product as it is delivered.

Revised sections: n.a.
BGV D1 (VBG 15)

Legend:

n.a. = not applicable / n.v., n.av. = not available / n.g., n.c. = not checked / k.D.v., n.d.a. = no data available
WEL = Workplace Exposure Limit EH40, TWA = Long-term exposure limit (8-hour TWA (= time weighted average) reference period), STEL = Short-term exposure limit (15-minute reference period) / BMGV = Biological monitoring guidance value EH40
AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany) / BGW = "Biologischer Grenzwert" (biological limit value, Germany)
VbF = Regulations for flammable liquids (Austria)
VOC = Volatile organic compounds
AOX = Adsorbable organic halogen compounds
ATE = Acute Toxicity Estimates according to Regulation (EC) 1272/2008 (CLP)

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
No responsibility.

These statements were made by:

Chemical Check GmbH, Wöbbeler Straße 2-4, D-32839 Steinheim, Tel.: +49 5233 94 17 0, +49 1805-CHEMICAL / +49 180 52 43 642, Fax: +49 5233 94 17 90, +49 180 50 50 455

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