

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

1.1 Product identifier

Solder with flux
Product code: CEKA SOL CR

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

Solders with flux
Professional use

Uses advised against:
Do not use for purposes other than those listed.

1.3 Details of the supplier of the safety data sheet

ALPHADENT NV, Mannebeekstraat 33, 8790 Waregem, Belgium, T +32 (0)56 629 531

1.4 Emergency telephone number

Belgian Poison Control Centre (24 hours) **070 245 245** or call a poison control centre in your area

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

Pictograms:
GHS05, GHS07

Hazard class and category code(s):
Skin Corr. 1B; Acute Tox. 4

Hazard statement code(s):
H302 – Harmful if swallowed.
H314 – Causes severe skin burns and eye damage.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, signal word code(s):
GHS05, GHS07 - Danger



Hazard statement code(s):
H302 – Harmful if swallowed.
H314 – Causes severe skin burns and eye damage.

Precautionary statements:

Prevention

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301+P330+P331 – IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 – IF ON SKIN (or hair): remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 – IF INHALED: remove person to fresh air and keep comfortable for breathing.

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 CENTRE/doctor/...

Contains:
potassium bifluoride

2.3 Other hazards

Contains:
boric acid – SVHC

The use of this chemical agent involves the obligation of "risk assessment" by the employer in accordance with the provisions of Legislative Decree No 81 of 9 April 2008. Workers exposed to this chemical agent should not be subject to health surveillance if the results of the risk assessment show that, depending on the type and amount of hazardous chemical agent and the method and frequency of exposure to the agent, there is only a "moderate risk" for the health and safety of workers and that the measures envisaged in the same legislative decree are sufficient to reduce the risk.

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrelevant

3.2 Mixtures

Refer to paragraph 16 for full text of risk phrases and hazard statements.

Metal alloy - solder with incorporated flux

Boric acid and potassium bifluoride related only to the incorporated flux

| Substance | Concentration | Classification | Index | CAS | EINECS | Reach |
|----------------------|---------------|--------------------------------------------|--------------|------------|-----------|-------|
| boric acid – SVHC | > 1 <= 5% | Repr. 1B, H360FD | 005-007-00-2 | 10043-35-3 | 233-139-2 | |
| potassium bifluoride | > 1 <= 5% | Acute Tox. 3, H301; Skin Corr. 1B, H314 | 009-008-00-9 | 7789-29-9 | 233-156-2 | |

SECTION 4. First aid measures

4.1 Description of first aid measures

Inhalation:

Air the area. Move the contaminated patient immediately from the area and keep him at rest in a well-ventilated room. CALL A PHYSICIAN.

Direct contact with skin (with the flux):

Take off immediately all contaminated clothing.

In case of contact with skin, wash immediately with plenty of water.

Consult a physician immediately.

Direct contact with eye (with the flux):

Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect the eyes with a dry sterile gauze. Seek medical advice immediately.

Ingestion:

The product is harmful and can cause irreversible damages even following a single exposure if swallowed.

Absolutely do not induce vomiting or emesis. Seek medical advice immediately.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

Immediately call a POISON CENTER/doctor.

SECTION 5. Firefighting measures

5.1 Extinguishing media

Advised extinguishing agents:

Water spray, CO₂, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing means to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Use respiratory protection.

Safety helmet and full protective suit.

The spray water can be used to protect the people involved in the extinction.

A self-contained breathing apparatus may also be used, especially when working in confined and poorly ventilated areas and when using halogenated extinguishers (fluobrene, Solkan 123, naf, etc).

Keep containers cool with water spray.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Wear mask, gloves and protective clothing.

6.1.2 For emergency responders:

Wear mask, gloves and protective clothing.

Provide sufficient ventilation.

6.2 Environmental precautions

Contain spill.

The product is recoverable.

Discharge the remains in compliance with the regulations.

6.3 Methods and material for containment and cleaning up

6.3.1 For containment:

Rapidly recover the product. Wear a mask and protective clothing.

Recover the product for reuse, if possible, or removal.

6.3.2 For cleaning up:

After wiping up, wash the area and materials involved with water.

6.3.3 Other information

None in particular

6.4 Reference to other sections

Refer to paragraphs 8 and 13 for more information.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Avoid contact and inhalation of vapours during processing.

Do not eat or drink when using this product.

See also paragraph 8 below.

- 7.2 Conditions for safe storage, including any incompatibilities**
Keep in the original container. No other special measure required.
- 7.3 Specific end use(s)**
Professional use:
Solder with flux. Handle with care.
Avoid contact and inhalation of vapours during processing.

SECTION 8. Exposure controls/personal protection

- 8.1 Control parameters**
Related to the substances contained:
Silver – TLV-TWA: 0.1 mg/m³
Copper – TLV-TWA: 0.2 mg/m³

8.2 Exposure controls



Appropriate engineering controls:
Professional use:
No specific monitoring foreseen

Individual protection measures:

- (a) Eye/face protection
When handling the pure product, use safety glasses (cage spectacles) (EN 166).
- (b) Skin protection
 - (i) Hand protection
When handling the pure product, use chemical-resistant protective gloves (EN 374-1/EN 374-2/EN 374-3).
 - (ii) Other
When handling the pure product, wear full protective skin clothing.
- (c) Respiratory protection
Use adequate protective respiratory equipment (EN 141).
- (d) Thermal hazards
No hazard to report.

Environmental exposure controls:
Use according to good working practices to avoid pollution into the environment.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

| Physical and chemical properties | Value | Determination method |
|-----------------------------------------|---------------|----------------------|
| Appearance | Solid | |
| Odour | Odourless | |
| Odour threshold | Irrelevant | |
| pH | Irrelevant | |
| Melting point/freezing point | 1000-1030 °C | |
| Initial boiling point and boiling range | Undefined | |
| Flash point | Non-flammable | ASTM D92 |
| Evaporation rate | Irrelevant | |

| | | |
|----------------------------------------------|----------------|--|
| Flammability (solid, gas) | Irrelevant | |
| Upper/lower flammability or explosive limits | Irrelevant | |
| Vapour pressure | Irrelevant | |
| Vapour density | Irrelevant | |
| Relative density | Not determined | |
| Solubility(ies) | Not soluble | |
| Water solubility | Not soluble | |
| Partition coefficient | Irrelevant | |
| Auto-ignition temperature | Irrelevant | |
| Decomposition temperature | Irrelevant | |
| Viscosity | Irrelevant | |
| Explosive properties | Not explosive | |
| Oxidising properties | Non-oxidising | |

9.2 Other information

No data available

SECTION 10. Stability and reactivity

10.1 Reactivity

Related to the substances contained:
boric acid:
Stable under normal conditions

10.2 Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3 Possibility of hazardous reactions

There are no hazardous reactions.

10.4 Conditions to avoid

Nothing to report.

10.5 Incompatible materials

Acids, alkalis and oxidising agents

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

11.1 Information on toxicological effects

ATE(mix) oral = 10,000.0 mg/kg
ATE(mix) dermal = 0.0 mg/kg
ATE(mix) inhalation = 0.0 mg/l/4 h

- (a) acute toxicity: Harmful product: do not ingest.
- (b) skin corrosion/irritation: Corrosive product: causes severe skin burns and eye damage.
- (c) serious eye damage/irritation: Corrosive product: causes severe skin burns and eye damage.
- (d) respiratory or skin sensitisation: not applicable
- (e) germ cell mutagenicity: not applicable
- (f) carcinogenicity: not applicable
- (g) reproductive toxicity: not applicable
- (h) specific target organ toxicity (STOT) single exposure: not applicable
- (i) specific target organ toxicity (STOT) repeated exposure: not applicable
- (j) aspiration hazard: not applicable

Related to the substances contained:

boric acid:

Hazardous health effects:

Through eye contact: Irritations.

If swallowed: May cause nausea, vomiting, intestinal disorders.

For absorption in large quantities: anxiety, ataxia (impaired muscle coordination), fatigue, spasms, change in body temperature. Other dangerous characteristics are not discarded. Take the usual precautions for handling products chemical.

May impair fertility.

May cause harm to the unborn child.

Toxic to reproduction category 2

SECTION 12. Ecological information

12.1 Toxicity

Related to the substances contained:

boric acid:

EC50 test (mg/l):

Fish (*Gambusia affinis*) = 5600 mg/l/96h, 1800 mg/l/24h; Classification: Highly toxic

Plants (B) = 1 mg/l; Classification: Very toxic

Use according to good working practices to avoid pollution into the environment.

potassium bifluoride:

Use according to good working practices to avoid pollution into the environment.

12.2 Persistence and biodegradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Contains:

boric acid – SVHC

12.6 Other adverse effects

No adverse effects

SECTION 13. Disposal considerations

13.1 Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorised companies.

Recover if possible. Operate according to local or national regulations.

SECTION 14. Transport information

14.1 UN number

Not included in the scope of application regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

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
No data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
It is not intended to carry bulk.

SECTION 15. Regulatory information

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

Legislative Decree 3/2/1997 No 52 (Classification, packaging and labelling of dangerous substances). Legislative Decree 14/3/2003 No 65 (Classification, packaging and labelling of dangerous preparations). Legislative Decree 2/2/2002 No 25 (Risks deriving from chemical agents during work). Decree of the Ministry of Labour 26/02/2004 (Occupational exposure limits), Ministerial Decree 03/04/2007 (Implementation of Directive no 2006/8/EC). Regulation (EC) No 1907/2006 (REACH), Regulation (EC) No 1272/2008 (CLP), Regulation (EC) No 790/2009. Legislative Decree 21/09/ 2005 No 238 (Seveso III Directive).

15.2 Chemical safety assessment

The supplier has carried out a chemical safety assessment.

SECTION 16. Other information

Description of the hazard statements exposed to point 3

H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.
H360FD May damage fertility. May damage the unborn child.

Classification based on data of all mixture components

GENERAL BIBLIOGRAPHY:

1. Directive 1999/45/EC and subsequent updates
2. Directive 67/548/EEC and subsequent amendments and adjustments
3. Council Regulation (EC) 1907/2006 of the European Parliament (REACH)
4. Regulation (EC) 1272/2008 of the European Parliament (CLP) and subsequent updates
5. Council Regulation (EC) 758/2013 of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. Regulation (EC) 528/2012 of the European Parliament and subsequent updates
8. Council Regulation (EC) 648/2004 of the European Parliament and subsequent updates
9. The Merck Index edition 10
10. Handling Chemical Safety
11. NIOSH – Registry of Toxic Effects of Chemical Substances
12. INRS – Fiche toxicologique
13. Patty – Industrial Hygiene and Toxicology
14. N.I. Sax – Dangerous properties of Industrial Materials, 7th edition, 1989

Note to the user:

The information in this sheet is based on knowledge available to us on the date of the latest version. The user must ensure the fitness and completeness of the information in relation to the specific use of the product. It should not be interpreted as a guarantee of any specific property of the product. The use of the product does not fall under our direct control. The user has the obligation to observe under their own liability laws and regulations on hygiene and safety. We do not assume liability for improper use.

This sheet replaces and cancels all previous.