

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

### 1.1 Product identifier

CEKA SOL  
Dental solder with flux

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

Dental solders  
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

## 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):** H314 - Causes severe skin burns and eye damage.  
H302 - Harmful if swallowed.

### 2.2 Label elements

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

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



**Hazard statement code(s):**

H314 - Causes severe skin burns and eye damage.  
H302 - Harmful if swallowed.

**Precautionary statements – Prevention:**

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary statements – 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 or doctor/physician.

**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 n° 81 of April 9, 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.

## 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 - dental solder with 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	

## 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. If breathing stops, begin artificial respiration and seek immediate medical attention.

**Skin contact (with flux):** Take off immediately all contaminated clothing. Immediately wash the areas that have, or are only suspected to have, come into contact with the product with plenty of running water. Consult a physician immediately.

**Eye contact (with 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

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#### **4.3 Indication of any immediate medical attention and special treatment needed**

IF SWALLOWED: contact a POISON CENTRE or physician if you feel unwell.

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### **5. Firefighting measures**

#### **5.1 Extinguishing media**

##### **Suitable extinguishing media:**

Water spray, CO<sub>2</sub>, foam, dry chemical, depending on the materials involved in the fire.

##### **Extinguishing media which must not be used for safety reasons:**

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 a breathing apparatus, safety helmet and full protective suit.

The water spray 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 (Halon 1211 fluobrene, Solkan 123, NAF, etc). Keep containers cool with water spray.

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### **6. Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

##### **6.1.1 For non-emergency personnel:**

Remove spills or releases from the area and its surroundings.

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 spills. 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.

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## 7. Handling and storage

### 7.1 Precautions for safe handling

Avoid contact and inhalation of vapours during processing.  
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.

## 8. Exposure controls/personal protection

### 8.1 Control parameters

Related to contained substances:  
**Copper** – TLV-TWA: 0.2 mg/m<sup>3</sup>

### 8.2 Exposure controls

#### Appropriate engineering controls:

Professional use: No specific monitoring foreseen

#### Individual protection measures:

**Eye / face protection:** When handling the pure product, use safety glasses (cage spectacles) (EN 166).

**Hand protection:** When handling the pure product, use chemical-resistant protective gloves (EN 374-1/EN374-2/EN374-3).

**Skin protection:** When handling the pure product, wear full protective clothing.

**Respiratory protection:** Use adequate protective respiratory equipment (EN 141).

**Thermal hazards:** No hazard to report.

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

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	solid
Odour	odourless
Odour threshold	irrelevant
pH value	irrelevant
Melting point/freezing point	780-820 °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	not soluble
Water solubility	not soluble
Partition coefficient: n-octanol-water	irrelevant
Auto-ignition temperature	irrelevant
Decomposition temperature	irrelevant
Viscosity	irrelevant
Explosive properties	not explosive
Oxidizing properties	non-oxidizing

**9.2 Other information:** No data available

## 10. Stability and reactivity

**10.1 Reactivity:** 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 oxidizing agents

**10.6 Hazardous decomposition products:** Does not decompose when used for intended uses.

## 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

**Acute toxicity:** Harmful product: do not ingest.

**Skin corrosion/irritation:** Corrosive product: causes severe skin burns and eye damage.

**Serious eye damage/irritation:** Corrosive product: causes severe skin burns and eye damage.

**Respiratory or skin sensitization:** Not applicable

**Germ cell mutagenicity:** Not applicable

**Carcinogenicity:** Not applicable

**Reproductive toxicity:** Not applicable

**Specific Target Organ Toxicity (STOT)**

Single exposure: not applicable

Repeated exposure: not applicable

**Aspiration hazard:** Not applicable

Related to contained substances:

**Boric acid:**

Dangerous effects for health:

Eye contact: irritations.

Ingestion: may cause nausea, vomiting, intestinal disorders.

If absorbed in large quantities: anxiety, ataxia (coordination disorders traction system), fatigue, spasms, modification of the body temperature. Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

May impair fertility.

May cause harm to the unborn child.

Toxic to reproduction category 2

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**12. Ecological information**

**12.1 Toxicity**

Related to contained substances:

**Boric acid:**

Test EC50 (mg / l):

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

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

Adopt good working practices, avoiding littering.

**Potassium bifluoride:**

Adopt good working practices, avoiding littering.

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

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**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 authorized companies. Recover if possible. Operate according to local or national regulations.

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**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.

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**15. Regulatory information**

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

No data available

**15.2 Chemical safety assessment**

The supplier has not made an assessment of chemical safety.

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**16. Other information**

Description of the hazard statements exposed to point 3

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

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) no 758/2013 of the European Parliament
6. Regulation (EC) no 453/2010 of the European Parliament
7. Regulation (EC) no 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 Centre Document
13. Patty – Industrial Hygiene and Toxicology
14. N.I. Sax – Dangerous properties of Industrial Materials, 7<sup>th</sup> 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.