

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

1.1 Product identifier

CEKA SOL W
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, GHS08

Hazard class and category code(s): Skin Corr. 1B; Skin Sens. 1; Carc. 2; Acute Tox. 4

Hazard statement code(s):

H314 – Causes severe skin burns and eye damage.
H317 – May cause an allergic skin reaction.
H351 – Suspected of causing cancer.
H302 – Harmful if swallowed.

2.2 Label elements

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

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



Hazard statements:

H314 – Causes severe skin burns and eye damage.
H317 – May cause an allergic skin reaction.
H351 – Suspected of causing cancer.
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.

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.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

Contains: potassium bifluoride, nickel

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 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.

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
Nickel	> 10 <= 20%	Skin Sens. 1, H317; Carc. 2, H351; STOT RE 1, H372	028-002-00-7	7440-02-0	231-111-4	
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	232-156-2	

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 has stopped, give artificial respiration.

Direct contact with skin (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 and possibly with soap.

Direct contact with eyes (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. Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

Ingestion: The product is harmful and can cause irreversible damage even following a single exposure if swallowed. Do not induce vomiting or emesis. Seek immediate medical assistance.

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

If exposed or concerned: get medical advice/attention.

If skin irritation or rash occurs: get medical advice/attention.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Water spray, CO₂, 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.

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.

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.

8. Exposure controls/personal protection

8.1 Control parameters

Related to contained substances:

Nickel:

TLV: (Inhalable fraction) 1.5 mg/m³ as TWA A5 (not suspected as a human carcinogen);
(ACGIH 2004)

MAK: (Inhalable fraction) sensitization of respiratory tract and skin (Sah); Carcinogen category: 1
(DFG 2004)

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	865-930 °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: If brought into contact with skin, the product can cause skin sensitization.

Germ cell mutagenicity: Not applicable

Carcinogenicity: The product may pose a risk of carcinogenesis.

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:

Nickel:

Routes of exposure: The substance can be absorbed into the body by inhalation of fine dust.

Inhalation risk: Evaporation at 20 °C is negligible; a harmful concentration of airborne particles, however, can be reached quickly when dispersed.

Effects of short-term exposure: May cause mechanical irritation. Inhalation of fumes may cause pneumonias.

Effects of long-term or repeated exposure: Repeated or prolonged contact may cause skin sensitization. Repeated or prolonged inhalation exposure may cause asthma. Lungs may be affected by repeated or prolonged exposure. It is possible that this substance is carcinogenic to man.

Acute hazards/symptoms: Cough. Shortness of breath.

Notes: Depending on the degree of exposure, periodic medical examination is indicated. The symptoms of asthma often do not manifest until a few hours and they are aggravated by physical effort. Rest and medical observation are therefore essential. Anyone who has shown symptoms of asthma due to this substance should avoid any further contact.

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

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

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.

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.

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.

16. Other information

Description of the hazard statements exposed to point 3

H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
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) No 1907/2006 of the European Parliament (REACH)
4. Regulation (EC) No 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) No 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, 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.