

# SAFETY DATA SHEET

**Product name:** ANA SINGLE BOND

SDS Drawn up: 1996-09-09 SDS Revised: 2012-03-01

## 1. Identification of the substance / preparation and of the company

**Trade name:** ANA SINGLE BOND

**Chemical name:**

**Field of application:** Dental adhesive

**Supplier:** Nordiska Dental AB

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Telephone no: +46 431 443 360

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## 2. Hazards identification

**Classification:** Irritant and flammable.

**Adverse physicochemical effects:** Very flammable.

**Adverse human health effects:** Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. Acetone vapours may cause drowsiness and dizziness.

**Adverse environmental effects:-**

**Classification of the mixture** In accordance with Regulation (EC) No. 1272/2008:

Flammable liquids (Category 2), Eye irritation (Category 2), Specific target organ toxicity - single exposure (Category 3).

According to EU Directive 67/548/EEC as amended

Highly flammable. Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Vapors may cause drowsiness and dizziness.

### Label information



**Pictogram**

**Signal word** Danger

**Hazard statements:** H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation

H336 May cause drowsiness or dizziness

**Precautionary statements:** P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue to rinsing. EUH066 Repeated exposure may cause skin dryness or cracking.

## 3. Composition / information on ingredients

Component	CAS-no	Einecs-no	Content (%)	Classification*
2-Hydroxyethyl Methacrylate (HEMA)	868-77-9	212-782-2	1-5	Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1; H315, H317, H319
Triethylene glycol dimethacrylate (TEDMA)	109-16-0	203-652-6	1-5	Skin Irrit. 2, Eye Irrit. 2; Skin Sens. 1; STOT SE 3; H315, H317, H319, H335
Methacrylated phosphoric acid			5-10	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335
Acetone	67-64-1	200-662-2	70-75	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3, H225, H319, H336,
Others			1-5	

\* The full wordings of the phrases are listed in section 16.

#### 4. First aid measures

**Inhalation:** Get fresh air and rest. Rinse the nose, the mouth and the throat with water, provided that the person is fully conscious. If the person is not breathing, give artificial respiration and get medical attention as soon as possible.

**Skin contact:** Take off contaminated clothing. Wash off with soap and water.

**Eye contact:** Keep the eyelids wide apart and flush with plenty of water for at least 15 minutes. Get medical attention.

**Ingestion:** Do not induce vomiting. Get medical attention as soon as possible. Gastric lavage may be necessary.

**Further information:** Never give any food and/or drink to an unconscious person. Please show this safety data sheet to the doctor on duty. Get medical attention in case of uncertainty.

#### 5. Fire-fighting measures

**Suitable extinguishing media:** Foam, dry chemical powder or water.

**Extinguishing media which must not be used:** Jet of water.

**Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:** Acetone vapours may be explosive together with air, at room temperature. Contaminated clothing is flammable. The fumes are heavier-than-air and will accumulate near the floor and in low-lying spaces. When catching fire irritating fumes containing carbon monoxide and carbon dioxide may form.

**Special protective equipment:** Protective equipment in compliance with national regulations.

**Further information:** Take precautionary measures against static discharges and keep away from sources of ignition.

#### 6. Accidental release measures

**Personal precautions:** Notice the risk of fire. See to that the ventilation is sufficient. See to that the premises are properly aired.

**Environmental precautions:** Prevent the spillage from reaching the outlets.

**Methods for cleaning up:** Collect mechanically. Spillage should be cured before disposal.

#### 7. Handling and storage

**Handling:** The product should be handled with care and in accordance with strict hygiene practises, and in well-ventilated areas only.

**Storage:** Recommended storage temperature < 25°C. Store in a dark and cool place. Keep in a solvent-resistant and tightly closed plastic container. Can be stored for two years, counting from the date of manufacture, always provided that the product is properly stored.

#### 8. Exposure controls / personal protection

**Exposure limit values:** Acetone: OSHA Permissible Exposure Limit (PEL): Time Weighted Average (TWA): 1 000 ppm. NIOSH Recommended Exposure Limit (REL): TWA: 250 ppm. NIOSH Immediately Dangerous to Life or Health (IDLH): 2 500 ppm [10 % LEL].

**Exposure controls:** All work should take place in well ventilated areas, in accordance with strict hygiene practises. All work should take place in suitable premises, in accordance with the existing legislation and regulations. See also heading 7. Handling and storage.

**Occupational exposure controls:**

- **respiratory protection:** Protective measures, e.g. a mask, could be needed.
- **hand protection:** Protective gloves should be used in order to avoid exposure.
- **eye protection:** Eye protectors should be used in order to avoid exposure.
- **skin protection:** Protective clothing should be used in order to avoid exposure.

**Environmental exposure controls:-**

**Further information:** Methacrylates may cause sensitization by skin contact. Therefore, avoid skin contact. Inhaling aerosols/dust containing methacrylates should also be avoided.

## 9. Physical and chemical properties

### General information:

- Appearance: Yellowish viscous liquid.
- Odour: Acetone.

### Important health, safety and environmental information:

- |   |                                     |                                   |                               |
|---|-------------------------------------|-----------------------------------|-------------------------------|
| · pH:                                     | < 7,0.                              | · Boiling point/interval:         | Ca. 56°C.                     |
| · Flash point:                            | > -20°C.                            | · Flammability (solid, gas):      | -                             |
| · Explosive properties:                   | IL: 2,5 % (Vol).<br>uL: 13 % (Vol). | · Oxidising properties:           | -                             |
| · Vapour pressure:                        | 230 mbar (20°C).                    | · Density:                        | 0,8 g/cm <sup>3</sup> (20°C). |
| · Water solubility:                       | Ca. 80 g/L (20°C).                  | · Solubility in organic solvents: | -                             |
| · Vapour density:                         | > 1 (air = 1).                      | · Evaporation rate:               | -                             |
| · Partition coefficient: n-octanol/water: | -                                   | · Viscosity:                      | -                             |

## 10. Stability and reactivity

**Conditions to avoid:** Heat and light. Decomposes at temperatures > 60°C.

**Materials to avoid:** Keep away from reducing agents, heavy metals and free radicals.

**Hazardous decomposition products:** When catching fire irritating fumes containing carbon monoxide and carbon dioxide may form.

**Further information:** Cures during exposure to visible- or UV-light.

## 11. Toxicological information

### Dangerous-to-health effects and symptoms related to:

- **inhalation:** May be irritating to the respiratory organ. May cause dizziness, headache and feeling of sickness. Inhaling a large dose may cause unconsciousness.
- **ingestion:** May be irritating. May cause adverse health-effects in the mucous membranes and in the central nervous system. May cause headache, stomach-ache, feeling of sickness, vomiting, dizziness and unconsciousness.
- **skin contact:** May be irritating to the skin. The substance may have an allergy-forming effect.
- **eye contact:** May be irritating. May cause irreversible visual handicap. May cause opacity in the cornea.

## 12. Ecological information

**Ecotoxicity:** Acetone: LD50 (oral, rat): > 5 800 mg/Kg. LC50 (fish, 96 hrs): 7 505 mg/L (L. Idus). EC50 (daphnia, 48 hrs): 12 100 mg/L (D. Magna).

**Mobility:-**

**Persistence and degradability:** Acetone is easily degraded.

**Bioaccumulative potential:** Acetone does not bioaccumulate in the aquatic environment. Acetone is not considered to cause long term adverse effects in the aquatic environment.

**Other adverse effects:-**

**Further information:** The ecological information on methacrylates is of limited extent. Only a large spillage of acetone is considered to be harmful to fish and other aquatic organisms. Small spillages and proper handling are not regarded as dangerous. Acetone is regarded as having only low toxic effects on mammals.

## 13. Disposal considerations

**Product:** Should be disposed of in accordance with local regulations and national legislation.

**Contaminated packaging:** Should be disposed of in accordance with local regulations and national legislation.

## 14. Transport information

### ADR/RID (Land transport):

Not classified as dangerous goods

### ICAO/IATA (Air transport):

Not classified as dangerous goods

### IMO/IMDG (Maritime transport):

Not classified as dangerous goods

## 15. Regulatory information

### Health, safety and environmental information shown on the label:

According to GHS (CLP):



**Pictogram:**

**Signal word** Danger

**Hazard statements:**

H225 Highly flammable liquid and vapour

H319 Causes serious eye irritation

H336 May cause drowsiness or dizziness

EUH066 Repeated exposure may cause skin dryness or cracking.

**Precautionary statements:**

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue to rinse.

According to European Directive 67/548/EEC as amended

**Hazard symbols:**



**Categories of danger:**

F – Highly Flammable, Xi - Irritant.

**Risk phrases:**

R11 Highly flammable.

R36/37/38 Irritating to eyes, respiratory system and skin

R43 May cause sensitization by skin contact.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

**Safety phrases:**

S9 Keep container in a well-ventilated place.

S16 Keep away from sources of ignition - No smoking.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 After contact with skin, wash immediately with plenty of water and soap.

S33 Take precautionary measures against static discharges

S46 If swallowed, seek medical advice immediately and show this container or label.

**Further information:** Safety Data Sheet according to REACH EC 1907/2006. Classification, labelling and packing of substances and mixtures (CLP) EC 1272/2008.

This product meets the demands of ISO 4049 and MDD 93/42/EEC. The product is CE-marked.

## 16. Other information

### Full wording of the phrases referred to in section 3:

Flam. Liq. 2 - Flammable liquids (Category 2), Skin Irrit. 2 - Skin irritation (Category 2); Eye Irrit. 2 - Eye irritation (Category 2); Skin Sens. 1; Skin sensitization (Category 2), STOT SE 3 - Specific target organ toxicity - single exposure (category 3): H315 Harmful if swallowed, H317, H319 Causes serious eye irritation, H225 Highly flammable liquid and vapor, H335 May cause respiratory irritation, H336 can make you drowsiness or dizziness.

**Sources of key data:** Swedish National Chemicals Inspectorate, Swedish Work Environment Authority, Eur-Lex European Union law. National Institute for Occupational Safety and Health (NIOSH). Occupational Safety and Health Administration (OSHA).

**The safety data sheet is revised in order to:** Classification and labelling according to Regulation (EC) No 1272/2008 and the European Directive 67/548 / EEC as amended.

The information in this safety data sheet is based upon our present knowledge. The information is presented with the intention of describing the safest way of handling the product. The safety data sheet is therefore not to be regarded as a complete chemical description of the product. Consequently, the user is responsible for making sure that the product is meant to be used in the actual field of application and that it serves the purpose intended.