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

Trade name: Astron Clearsplint

Article No. (REF)
26181 – 160 g Powder / 120 g Liquid
26184 – 320 g Powder / 240 g Liquid
26187 – 960 g Powder / 720 g Liquid

Relevant identified uses of the substance or mixture
Manufacturing of dental splints in a dental laboratory

Manufacturer
Astron Dental Corporation, 815 Oakwood Road, Unit G, Lake Zurich, IL 60047 (USA)

Supplier (importer/only representative/downstream user/distributor)
Kentzler-Kaschner Dental GmbH
Mühlgraben 36
D - 73479 Ellwangen

Telephone / Telefax / E-Mail
Phone: +49/7961/90 73 0 / FAX: +49/7961/52031 / E-Mail: info@kkd-topdent.de

Emergency Telephone Number:
Phone: +49/7961/90 73 0

02. Hazards identification

Classification of the substance or mixture

Indication of Danger
Inhalation and ingestion may cause nausea – intensive skin contact may cause rash

R-Phrases
R 43 May cause sensitisation by skin contact.
R 36 / R 37 / R 38 Irritating to eyes, respiratory system and skin.

Label elements

Xi – Irritant (only liquid)

R-Phrases
R 43 May cause sensitisation by skin contact.
R 36 / R 37 / R 38 Irritating to eyes, respiratory system and skin.

S-Sätze
-
GHS Labelling

Signal word: Warning

H-Phrases
H 317  May cause an allergic skin reaction.
H 319  Causes serious eye irritation.
H 315  Causes skin irritation.
H 335  May cause respiratory irritation.

P-Phrases
-

03. Composition/information on ingredients

Description of the mixture
Powder Component: Modified Ethyl Methacrylate Polymer
Liquid Component: Modified Ethyl Methacrylate Monomer

Hazardous ingredients

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Index-No.</th>
<th>EEC No.</th>
<th>Substance name</th>
<th>Content</th>
<th>R-Phrase(s)</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-52-7</td>
<td>200-658-0</td>
<td></td>
<td>barbituric acid</td>
<td>&lt;10 %</td>
<td>R36/37/38</td>
<td>Xi</td>
</tr>
<tr>
<td>1565-94-2</td>
<td></td>
<td></td>
<td>Triethylenglycoldimethacrylate</td>
<td>&lt; 1 %</td>
<td>R36/37/38</td>
<td>Xi</td>
</tr>
</tbody>
</table>

04. First aid measures

General Advice
Clean skin and clothes immediately.

After Inhalation
Move to fresh air. Inhalation can cause Nausea.

After Skin Contact
Wash skin with plenty of water and soap. Skin Contact can cause Rash.

After Eye Contact
Flush eyes for 15 minutes with water and call physician

After Swallowing
Drink plenty of water, Induce vomiting and call for immediate medical attention

After Ingestion
Ingestion can cause Nausea.
Advice on Treatment
Treat and examine according to the symptom

Medical Conditions
Generally Aggravated by Exposure

Carcinogenicity
No

NTP
No

IARC Monographs
No

OSHA Regulated
Not required

05. Fire fighting measures

Suitable extinguishing Media
Chemical foam, carbon dioxide, dry chemicals, water, Fog

Special Fire Fighting Procedures
Safe distance. Cool exposed material with cold water mist. Vapors are heavier than air and may travel to ignition source.

Unusual Fire and Explosion Hazards
Sealed container exposed to elevated temperatures may rupture explosively due to polymerization. Vapors are heavier than air and may travel to ignition source.

Special Protective Equipment for Fire-Fighting
Inhalation protection.

06. Accidental release measures

Person-Related Precautions
Avoid inhalation of dust and vapors – evacuate rooms with high concentration of product vapors – keep away from ignition sources

Environmental Protection Measures:
Do not dispose into sewer or drain

Procedures for Cleaning / Absorption
Absorb spills with inert material. Dispose in accordance with all local, state and federal regulations
07. **Handling and storage**

   **Advice on Safe Handling**
   Self contained breathing apparatus should be used

   **Advice on Protection against Fire and Explosion**
   Safe distance of heat and ignition sources

   **Requirements for Storage Rooms and Vessels**
   Excessive heat, store in a cool, dry place away from all sources of ignition

   **Steps to be taken in case Material is Released or Spilled**
   For high vapor concentration, evacuate area, eliminate ignition sources, absorb spills with inert material, transfer to a suitable container for disposal.

   **Precautions to be taken in Handling and Storing**
   Store in a cool, dry place away from sources of ignition.

   **Other Precautions**
   Always use in accordance to package directions.

08. **Exposure controls/personal protection**

   **Additional Advice Relating to The Design of Production Equipment**
   Self contained breathing apparatus should be used, when vapors exceed 10 ppm

   **Personal Protective Equipment**

   **Respiratory protection**
   When vapors exceed 10 PPM, a self contained breathing apparatus should be used.

   **Hand protection**
   Impervious, neoprene type gloves

   **Eye / Face protection**
   Safety goggles

   **General Protective Measures**
   Do not drink, eat or smoke

   **Other Protective Clothing or Equipment**
   Eyewash

   **Work/Hygienic Practise**
   Always practice good personal hygiene.

   **Ventilation**
   Local Exhaust: Concentration below 100 PPM Special: None
   Mechanical (General): None Other: None
09. **Physical and chemical properties**

**Appearance**
- **Physical state:** Powder/Liquid
- **Colour:** Clear, pale yellow
- **Odour:** Mild

**Safety relevant basic data**

- **Boiling point:** 92 °C
- **Specific Gravity (H₂O=1):** 1.005
- **Vapour Pressure (mm Hg):** Form 7, mmHg at 160°C
- **Melting Point:** N/A
- **Vapor Density (AIR=1):** 1
- **Evaporation Rate (Butyl Acetate=1):** N/A
- **Solubility in Water:** Negligible

10. **Stability and Reactivity**

**Conditions to Be Avoided**
Excessive heat. No hazard when stored accordingly.

**Substances to Be Avoided**
Reducing and oxidizing agents. Can soften paint and rubbery surfaces.

**Hazardous Decomposition or Byproducts**
Carbon monoxide, carbon dioxide, smoke

**Further Information**
Excessive heat may risk uncontrolled polymerization – product stable

11. **Toxicological Information**
Product not tested. Refer to danger- and safety instructions in point 3/15

**Ingredients Relating to Workplace-Limits to Get Supervised**

<table>
<thead>
<tr>
<th>Value/Range</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD 50 oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD 50 dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC 50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>inhalational</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Corrosive and irritant effects**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye</td>
<td>Prolonged exposure can lead to eye irritation and skin rash, nausea, headaches and in some cases unconsciousness.</td>
<td></td>
</tr>
<tr>
<td>Skin</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sensitization

<table>
<thead>
<tr>
<th>Skin</th>
<th>Effect</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory System</td>
<td>possible</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Effects after Repeated or Long-Term Exposition**
Not known

**Cancerogenicity, Mutagenicity, Generative Hazards**
Not known.

**Experiences Made in Practice**

**Rating Relevant Observations**
Not known

**Further Observations**
--

**General Remarks**
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**12. Ecological Information**

**Eliminability (Persistence and Degradability)**

**Physical-chemical**
- Procedure: Not known
- Method of Analysis: Not known
- Elimination Level: Not known
- Validation: Not known
- Additional Hints: Not known

**Biological**
- Procedure: Not known
- Method of Analysis: Not known
- Elimination Level: Not known
- Validation: Not known
- Additional Hints: Not known

**Performance in Environmental compartments**
- Mobility and Accumulation Capability: Not known
- Additional Hints: Not known
Ecotoxicity

<table>
<thead>
<tr>
<th>Aquatic Toxicity</th>
<th>Test (Species/Duration)</th>
<th>Concentration</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>fish toxicity</td>
<td>Not known</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daphnia toxicity</td>
<td>Not known</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algae toxicity</td>
<td>Not known</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bacteria toxicity</td>
<td>Not known</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Performance in Sewage Plants
- 

Persistence and degradability
Not known

Behaviour in sewage plant
Not known

General Hints
Do not dispose larger amounts into sewer or drain.

13. Disposal Considerations

Identification
Always following package instructions. Dispose in accordance with all local, state and federal regulations.

Waste Disposal Method
Do not dispose into sewer or drain, incinerate liquid in proper equipment. Dispose in accordance with all local, state and federal regulations.

Packaging

Contaminated packaging
Packages have to be drained carefully, absorb spills with inert materials and transfer to a suitable container for disposal.

14. Transport Information

Land Transport ADR/RID
Remarks
Not a hazardous product

River Transport ADN/ADNR
Remarks
Not a hazardous product

Sea Transport IMDG/GGV Sea
Remarks
Not a hazardous product
Safety Data Sheet  
according to Regulation (EC) No 1907/2006 (REACH)

Trade name: Astron Clearsplint  
Revision date: 01.08.2014

Air Transport ICAO-TI and IATA-DGR  
Remarks  
Not a hazardous product

15. Regulatory Information

Labeling According to EC-Directives

Symbols and hazard designations of the product  
Xi – Irritant – only liquide

R-Phrases
R 43 May cause sensitisation by skin contact.  
R 36 / R 37 / R 38 Irritating to eyes, respiratory system and skin.

S-Sätze
-

H-Phrases  
H 317 May cause an allergic skin reaction.  
H 319 Causes serious eye irritation.  
H 315 Causes skin irritation.  
H 335 May cause respiratory irritation.

P-Phrases
-

National Regulations

Water Hazard Class (WGK)  
Class: 0

16. Further Information

Issuing Department for Material Safety Data Sheet  
Product Development / Quality Management

Source of Most Essential Data  
Producers’ Material Safety Data Sheet

Notes
The information contained herein is based on the present state of our knowledge and on our experiences with the product. The material safety data sheet is strictly intended for risk minimizing when handling the product. The information characterizes exclusively with regard to safety aspects and does not represent a guarantee of the properties of the product within the meaning of our general terms and conditions. The information does not dispense the user from his duties of care with respect to the observance of present laws, regulations and terms.