1 Identification

· Product identifier
  · Trade name: 2028
  · Application of the substance / the mixture: Cyanoacrylate Adhesive

· Details of the supplier of the safety data sheet
  · Manufacturer/Supplier:
    Cyberbond LLC
    401 North Raddant Road
    Batavia, IL 60510
    USA
    sales@cyberbond1.com
    630-761-8900

· Information department: Product safety department

· Emergency telephone number:
  · International: 1-(352)-323-3500
  · US & Canada: 1-(800)-535-5053

2 Hazard(s) identification

· Classification of the substance or mixture

![GHS07]

Skin Irrit. 2  H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 3 H335 May cause respiratory irritation.

H227 Combustible liquid.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

![x]

Irritant

Irritating to eyes, respiratory system and skin.

· Information concerning particular hazards for human and environment:
  The product has to be labeled due to the calculation procedure of international guidelines.

· Classification system:
  The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· Label elements
  · GHS label elements: The product is classified and labeled according to the Globally Harmonized System (GHS).
  · Hazard pictograms

![GHS07]

· Signal word: Warning

· Hazard-determining components of labeling:
  ethyl 2-cyanoacrylate

(Contd. on page 2)
Trade name: 2028

**Hazard statements**
- Combustible liquid.
- Causes skin irritation.
- Causes serious eye irritation.
- May cause respiratory irritation.

**Precautionary statements**
- Keep away from flames and hot surfaces. – No smoking.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Wear protective gloves / eye protection / face protection.
- Wear protective gloves.
- Wear eye protection / face protection.
- Wash thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Specific treatment (see on this label).
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a poison center/doctor if you feel unwell.
- If skin irritation occurs: Get medical advice/attention.
- If eye irritation persists: Get medical advice/attention.
- In case of fire: Use for extinction: CO2, powder or water spray.
- If on skin: Wash with plenty of water.
- Take off contaminated clothing and wash it before reuse.
- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed.
- Store in a well-ventilated place. Keep cool.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards**
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

**Composition/information on ingredients**
- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7085-85-0 ethyl 2-cyanoacrylate</td>
<td>50-100%</td>
</tr>
<tr>
<td>123-31-9 1,4-dihydroxybenzene</td>
<td>&lt;0.1%</td>
</tr>
</tbody>
</table>

**First-aid measures**
- Description of first aid measures
  - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  - **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
  - **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
  - **After swallowing:** Call a doctor immediately.
  - Information for doctor:
    - **Most important symptoms and effects, both acute and delayed** Breathing difficulty
    - **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

**Fire-fighting measures**
- Extinguishing media
  - **Suitable extinguishing agents:** CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  - **For safety reasons unsuitable extinguishing agents:** Water with full jet
  - **Special hazards arising from the substance or mixture** Nitrogen oxides (NOx)
  - **Advice for firefighters**
  - **Protective equipment:** Wear self-contained respiratory protective device.
6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:**
  - Allow to solidify. Pick up mechanically.
  - Ensure adequate ventilation.
  - Do not use cotton or natural fiber cloths for clean up
- **Reference to other sections**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
  - Store in cool, dry place in tightly closed receptacles.
  - Keep away from heat and direct sunlight.
  - Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
  - **Requirements to be met by storerooms and receptacles:**
    - Store in a cool location.
    - Store only in the original receptacle.
  - **Information about storage in one common storage facility:** Store away from oxidizing agents.
  - **Further information about storage conditions:** Keep receptacle tightly sealed.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
  - **Components with limit values that require monitoring at the workplace:**
    - 7085-85-0 ethyl 2-cyanoacrylate
      - TLV Long-term value: 1 mg/m³, 0.2 ppm
    - Additional information: The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    - The usual precautionary measures for handling chemicals should be followed.
    - Keep away from foodstuffs, beverages and feed.
    - Immediately remove all soiled and contaminated clothing.
    - Avoid contact with the eyes and skin.
  - **Breathing equipment:** Not necessary if room is well-ventilated.
  - **Protection of hands:**
    - Protective gloves
      - Impervious gloves
      - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
      - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
      - **Material of gloves** Nitrile rubber, NBR
      - **Penetration time of glove material**
        - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Trade name: 2028

- Not suitable are gloves made of the following materials:
  Cotton or natural fibers
  PVC gloves

- Eye protection:
  Safety glasses
  Tightly sealed goggles

- Body protection: Protective work clothing

## 9 Physical and chemical properties

### Information on basic physical and chemical properties

#### General Information

- Appearance:
  - Form: Liquid
  - Color: Colorless
  - Odor: Characteristic
  - Odour threshold: Not determined.
  - pH-value: Not determined.

- Change in condition
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: > 150 °C (> 302 °F)

- Flash point: 87 °C (189 °F)

- Flammability (solid, gaseous): Not applicable.

- Ignition temperature:
  - Decomposition temperature: Not determined.
  - Auto igniting: Product is not selfigniting.
  - Danger of explosion: Not determined.

- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.

- Vapor pressure at 20 °C (68 °F): 0.3 hPa

- Density at 20 °C (68 °F): 1.05 g/cm³ (8.762 lbs/gal)

- Relative density
  - Not determined.

- Vapour density
  - Not determined.

- Evaporation rate
  - Not determined.

- Solubility in / Miscibility with
  - Water: Not miscible or difficult to mix.

- Partition coefficient (n-octanol/water): Not determined.

- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.

- Solvent content:
  - Organic solvents: 0.0 %
  - Solids content: 100.0 %

- Other information
  - No further relevant information available.
10 Stability and reactivity

- Reactivity
  - Chemical stability
    - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
  - Possibility of hazardous reactions
    - Reacts with alcohols, amines, aqueous acids and alkalis.
    - Reacts with water and acids.
  - Conditions to avoid: No further relevant information available.
  - Incompatible materials: No further relevant information available.
  - Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - Primary irritant effect:
      - on the skin: Irritant to skin and mucous membranes.
      - on the eye: Iritating effect.
    - Sensitization: Sensitization possible through skin contact.
  - Additional toxicological information:
    - The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    - 123-31-9 1,4-dihydroxybenzene
  - NTP (National Toxicology Program)
    - None of the ingredients is listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    - None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - Behavior in environmental systems:
    - Bioaccumulative potential: No further relevant information available.
    - Mobility in soil: No further relevant information available.
  - Additional ecological information:
    - General notes:
      - Water hazard class 1 (Self-assessment): slightly hazardous for water
      - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.
14 Transport information

- **UN-Number**
  - DOT: NA1993
  - ADN, IMDG, IATA: Void
  - UN proper shipping name: COMBUSTIBLE LIQUID, N.O.S
  - DOT: Void
  - ADN, IMDG, IATA: Void

- **Transport hazard class(es)**
  - DOT, ADN, IMDG, IATA: Void

- **Packing group**
  - DOT: III
  - IMDG, IATA: Void

- **Environmental hazards:**
  - Marine pollutant: No
  - Special precautions for user: Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Transport/Additional information: Not applicable.

- **DOT**
  - Quantity limitations:
    - On passenger aircraft/rail: 60 L
    - On cargo aircraft only: 220 L

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - Sara
    - Section 355 (extremely hazardous substances):
      - 123-31-9 1,4-dihydroxybenzene
  - Section 313 (Specific toxic chemical listings):
    - 123-31-9 1,4-dihydroxybenzene
  - TSCA (Toxic Substances Control Act):
    - All ingredients are listed.

- **Proposition 65**
  - Chemicals known to cause cancer:
    - None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females**:
  - None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males**:
  - None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity**:
  - None of the ingredients is listed.

- **Carcinogenic categories**
  - EPA (Environmental Protection Agency)
    - 109-63-7 diethyl ether--boron trifluoride
      - I (oral)
  - TLV (Threshold Limit Value established by ACGIH)
    - 123-31-9 1,4-dihydroxybenzene
      - A3
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    - None of the ingredients is listed.
GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS07

Signal word

Warning

Hazard-determining components of labeling:
ethyl 2-cyanoacrylate

Hazard statements

Combustible liquid.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.

Precautionary statements

Keep away from flames and hot surfaces. – No smoking.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves / eye protection / face protection.
Wear protective gloves.
Wear eye protection / face protection.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see on this label).
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a poison center/doctor if you feel unwell.
If skin irritation occurs: Get medical advice/attention.
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In case of fire: Use for extinction: CO2, powder or water spray.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS: Product Safety Department
Contact: Cyberbond Regulatory Department
Date of preparation / last revision 06/02/2015 / 1

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
: Flammable liquids, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3