1 Identification

- **Product identifier**
- **Trade name:** 2241
- **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]

  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

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

(Contd. on page 2)
Trade name: 2241

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.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Concentration</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>

4 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.

5 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.

Specific end use(s) No further relevant information available.

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:

<table>
<thead>
<tr>
<th>Component</th>
<th>TLV Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7085-85-0 ethyl 2-cyanoacrylate</td>
<td>1 mg/m³, 0.2 ppm</td>
</tr>
</tbody>
</table>

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:
- 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

Penetration time of glove material
- The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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

(Contd. on page 4)
Eye protection: Safety glasses

Body protection: Protective work clothing

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:
- Form: Liquid
- Color: Black
- 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 %
- 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.
40.1.3 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: Irritating effect.
      · Sensitization: No sensitizing effects known.
    · Additional toxicological information:
      The product shows the following dangers according to internally approved calculation methods for preparations:
      Irritant

· Carcinogenic categories

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>123-31-9 1,4-dihydroxybenzene</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1333-86-4 Carbon black</td>
<td>2B</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (National Toxicology Program)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSHA-Ca (Occupational Safety &amp; Health Administration)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
<td></td>
</tr>
</tbody>
</table>

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 NA1993
· DOT NA1993
· ADN, IMDG, IATA Void

(Contd. on page 6)
Trade name: 2241

- UN proper shipping name
- DOT
- ADN, IMDG, IATA
- Transport hazard class(es)
- DOT, ADN, IMDG, IATA
- Class
- Packing group
- DOT
- IMDG, IATA

Environmental hazards:
- Marine pollutant: No
- Special precautions for user: Not applicable.
- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

Transport/Additional information:
- DOT
- Quantity limitations
  - On passenger aircraft/rail: 60 L
  - On cargo aircraft only: 220 L
- UN “Model Regulation”:

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):
    - 7085-85-0 ethyl 2-cyanoacrylate
    - 87-66-1 pyrogallol
    - 123-31-9 1,4-dihydroxybenzene
    - 33703-08-1 Diisononyl adipate
    - 17455-13-9 1,4,7,10,13,16-hexaoxacyclooctadecane
    - 1333-86-4 Carbon black
    - 109-63-7 diethyl ether–boron trifluoride
  - Proposition 65
    - Chemicals known to cause cancer:
      - 1333-86-4 Carbon black
    - 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
      - TLV (Threshold Limit Value established by ACGIH)
      - 123-31-9 1,4-dihydroxybenzene
      - 1333-86-4 Carbon black

(Contd. on page 7)
Trade name: 2241

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
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Wear protective gloves.
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Call a poison center/doctor if you feel unwell.
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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 08/10/2015 / 5

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)
DOT: US Department of Transportation
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
* Data compared to the previous version altered.