

Safety Data Sheet acc. to OSHA HCS

Printing date 06/04/2015

Reviewed on 06/04/2015

* 1 Identification

- **Product identifier**
- **Trade name: H4**
- **Application of the substance / the mixture** Adhesives
- **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**



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

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/04/2015

Reviewed on 06/04/2015

Trade name: H4

(Contd. of page 1)

· Precautionary statements

- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- Read label before use.
- 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:

7085-85-0	ethyl 2-cyanoacrylate	50-100%
142-16-5	Bis(2-ethylhexyl)maleate	0.1-<0.25%
123-31-9	1,4-dihydroxybenzene	<0.1%

* 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 (NO_x)
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/04/2015

Reviewed on 06/04/2015

Trade name: H4

(Contd. of page 2)

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:
7085-85-0 ethyl 2-cyanoacrylate
TLV Long-term value: 1 mg/m ³ , 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.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/04/2015

Reviewed on 06/04/2015

Trade name: H4

(Contd. of page 3)

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

- **Viscosity:**

Dynamic:	Not determined.
Kinematic:	Not determined.

- **Solvent content:**

Organic solvents:	0.0 %
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Solids content:	100.0 %
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- **Other information** No further relevant information available.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/04/2015

Reviewed on 06/04/2015

Trade name: H4

(Contd. of page 4)

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:** Irritating 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	3
· 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.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/04/2015

Reviewed on 06/04/2015

Trade name: H4

(Contd. of page 5)

14 Transport information

· UN-Number	
· DOT	NA1993
· ADN, IMDG, IATA	Void
· UN proper shipping name	
· DOT	COMBUSTIBLE LIQUID, N.O.S
· ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, ADN, IMDG, IATA	
· Class	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	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):

79-11-8	chloroacetic acid
123-31-9	1,4-dihydroxybenzene

· Section 313 (Specific toxic chemical listings):

79-11-8	chloroacetic acid
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)
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· TLV (Threshold Limit Value established by ACGIH)

79-11-8	chloroacetic acid	A4
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(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/04/2015

Reviewed on 06/04/2015

Trade name: H4

(Contd. of page 6)

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**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
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.
- **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
- **Date of preparation / last revision** 06/04/2015 / 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

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/04/2015

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Trade name: H4

(Contd. of page 7)

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

· * **Data compared to the previous version altered.**