

## Safety Data Sheet acc. to OSHA HCS

Printing date 05/27/2015

Reviewed on 05/27/2015

### 1 Identification

- **Product identifier**
- **Trade name: U301**
- **Application of the substance / the mixture** UV-curable 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

Acute Tox. 4 H302 Harmful if swallowed.  
Acute Tox. 4 H312 Harmful in contact with skin.  
Acute Tox. 4 H332 Harmful if inhaled.  
Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2A H319 Causes serious eye irritation.  
Skin Sens. 1 H317 May cause an allergic skin reaction.  
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. May cause sensitisation by skin contact.



Dangerous for the environment

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **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**



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- **Signal word** Warning

- **Hazard-determining components of labeling:**

N,N-dimethylacrylamide  
2-hydroxyethyl methacrylate  
isobornyl acrylate  
Urethane Acrylate

- **Hazard statements**

Combustible liquid.  
Harmful if swallowed, in contact with skin or if inhaled.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause an allergic skin reaction.  
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 protective gloves / protective clothing.  
Wear eye protection / face protection.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Contaminated work clothing must not be allowed out of the workplace.  
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 swallowed: Call a poison center/doctor if you feel unwell.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
Wash contaminated clothing before reuse.  
If skin irritation or rash occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
Rinse mouth.  
In case of fire: Use for extinction: CO<sub>2</sub>, 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:**

5888-33-5	isobornyl acrylate	25-50%
	Urethane Acrylate	≤25%
2680-03-7	N,N-dimethylacrylamide	10-<25%
868-77-9	2-hydroxyethyl methacrylate	2.5-<10%
2530-85-0	3-trimethoxysilylpropyl methacrylate	2.5-<10%

### 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.

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- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **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:**  
CO<sub>2</sub>, 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** No further relevant information available.
- **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.  
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **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:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **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.

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Avoid contact with the eyes and skin.

- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Protection of hands:**



Protective gloves

Neoprene 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.
- **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:

- |                           |                 |
|---------------------------|-----------------|
| · <b>Form:</b>            | Liquid          |
| · <b>Color:</b>           | Light yellow    |
| · <b>Odor:</b>            | Characteristic  |
| · <b>Odour threshold:</b> | Not determined. |
| · <b>pH-value:</b>        | Not determined. |

#### · Change in condition

- |   |                 |
|---|-----------------|
| · <b>Melting point/Melting range:</b>   | Undetermined.   |
| · <b>Boiling point/Boiling range:</b>   | Undetermined.   |
| · <b>Flash point:</b>                   | 70 °C (158 °F)  |
| · <b>Flammability (solid, gaseous):</b> | Not applicable. |

#### · Ignition temperature:

- |                                     |                              |
|-------------------------------------|------------------------------|
| · <b>Decomposition temperature:</b> | Not determined.              |
| · <b>Auto igniting:</b>             | Product is not selfigniting. |
| · <b>Danger of explosion:</b>       | Not determined.              |

#### · Explosion limits:

- |                 |                 |
|-----------------|-----------------|
| · <b>Lower:</b> | Not determined. |
| · <b>Upper:</b> | Not determined. |

- |                          |                 |
|--------------------------|-----------------|
| · <b>Vapor pressure:</b> | Not determined. |
|--------------------------|-----------------|

- |                   |                 |
|-------------------|-----------------|
| · <b>Density:</b> | Not determined. |
|-------------------|-----------------|

- |                           |                 |
|---------------------------|-----------------|
| · <b>Relative density</b> | Not determined. |
|---------------------------|-----------------|

- |                         |                 |
|-------------------------|-----------------|
| · <b>Vapour density</b> | Not determined. |
|-------------------------|-----------------|

- |                           |                 |
|---------------------------|-----------------|
| · <b>Evaporation rate</b> | Not determined. |
|---------------------------|-----------------|

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- **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.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **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:** No irritant effect.
  - on the eye:** No 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**

· <b>IARC (International Agency for Research on Cancer)</b>	
119-61-9 benzophenone	2B

· <b>NTP (National Toxicology Program)</b>	
None of the ingredients is listed.	

· <b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b>	
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.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**

Also poisonous for fish and plankton in water bodies.  
Toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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- **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
- **IMDG, IATA** UN3082
- **UN proper shipping name**
- **DOT** COMBUSTIBLE LIQUID, N.O.S
- **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Urethane Acrylate), MARINE POLLUTANT
- **IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Urethane Acrylate)
- **Transport hazard class(es)**
- **DOT**
- **Class** Void

- **IMDG, IATA**



- **Class** 9 Miscellaneous dangerous substances and articles
- **Label** 9
- **Packing group**
- **DOT, IMDG, IATA** III
- **Environmental hazards:** Product contains environmentally hazardous substances: isobornyl acrylate, Urethane Acrylate
- **Marine pollutant:** Yes  
Symbol (fish and tree)
- **Special marking (IATA):** Symbol (fish and tree)
- **Special precautions for user** Warning: Miscellaneous dangerous substances and articles
- **Danger code (Kemler):** 90
- **EMS Number:** F-A,S-F
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **Transport/Additional information:**

- **IMDG**
- **Limited quantities (LQ)** 5 kg
- **UN "Model Regulation":** UN3082, Environmentally hazardous substances, liquid, n.o.s. (Urethane Acrylate), 9, III

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

### Section 355 (extremely hazardous substances):

None of the ingredients is listed.

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<b>Section 313 (Specific toxic chemical listings):</b>	
None of the ingredients is listed.	
<b>TSCA (Toxic Substances Control Act):</b>	
5888-33-5	isobornyl acrylate
2680-03-7	N,N-dimethylacrylamide
868-77-9	2-hydroxyethyl methacrylate
15206-55-0	methyl benzoylformate
2530-85-0	3-trimethoxysilylpropyl methacrylate
947-19-3	1-hydroxy-cyclohexyl-phenylketone
10287-53-3	Ethyl-4-(dimethylamino)benzoate
119-61-9	benzophenone
82985-35-1	Bis[3-(trimethoxysilyl)propyl]amine
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide
5064-31-3	trisodium nitrilotriacetate
<b>Proposition 65</b>	
<b>Chemicals known to cause cancer:</b>	
119-61-9	benzophenone
<b>Chemicals known to cause reproductive toxicity for females:</b>	
None of the ingredients is listed.	
<b>Chemicals known to cause reproductive toxicity for males:</b>	
None of the ingredients is listed.	
<b>Chemicals known to cause developmental toxicity:</b>	
None of the ingredients is listed.	
<b>Carcinogenic categories</b>	
<b>EPA (Environmental Protection Agency)</b>	
None of the ingredients is listed.	
<b>TLV (Threshold Limit Value established by ACGIH)</b>	
None of the ingredients is listed.	
<b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>	
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:**

N,N-dimethylacrylamide  
2-hydroxyethyl methacrylate  
isobornyl acrylate  
Urethane Acrylate

**Hazard statements**

Combustible liquid.  
Harmful if swallowed, in contact with skin or if inhaled.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause an allergic skin reaction.  
May cause respiratory irritation.

**Precautionary statements**

Keep away from flames and hot surfaces. – No smoking.

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Avoid breathing dust/fume/gas/mist/vapors/spray  
 Wear protective gloves / eye protection / face protection.  
 Wear protective gloves.  
 Wear protective gloves / protective clothing.  
 Wear eye protection / face protection.  
 Wash thoroughly after handling.  
 Do not eat, drink or smoke when using this product.  
 Use only outdoors or in a well-ventilated area.  
 Contaminated work clothing must not be allowed out of the workplace.  
 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 swallowed: Call a poison center/doctor if you feel unwell.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 Wash contaminated clothing before reuse.  
 If skin irritation or rash occurs: Get medical advice/attention.  
 If eye irritation persists: Get medical advice/attention.  
 Rinse mouth.  
 In case of fire: Use for extinction: CO<sub>2</sub>, 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.

**Date of preparation / last revision** 05/27/2015 / 2

### 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  
 Acute Tox. 4: Acute toxicity, Hazard Category 4  
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
 Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A  
 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1  
 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3