



# Safety Data Sheet

Version 8.0  
Revision Date: 10/13/2021

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **6-(4'-CYANOBIHENYL-4-YLOXY)-HEXYL METHACRYLATE**  
Product abbreviation: CNBPHMA  
Product use: For laboratory research purposes.  
Supplier / Manufacturer: Polymer Source, Inc.  
Address: 124 Avro street, Dorval (Montreal), Quebec H9P 2X8, Canada  
Telephone: (+1) 514-421-5517  
Toll free: 1-866-422-9842  
Fax: (+1) 514-421-5518  
Emergency phone: (+1) 514-887-5517  
E-mail: [info@polymersource.com](mailto:info@polymersource.com)

## 2. HAZARDS IDENTIFICATION

Emergency overview      GHS classification:      Acute toxicity, Oral (Category 3), H301  
Acute toxicity, Inhalation (Category 4), H332  
Acute toxicity, Dermal (Category 4), H312  
Skin corrosion (Category 1B), H314  
Serious eye damage (Category 1), H318  
For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS Label elements, including precautionary statements:

Pictogram:



Signal word:

Danger

Hazard statements:

H301 Toxic if swallowed.  
H312 + H332 Harmful in contact with skin or if inhaled.  
H314 Causes severe skin burns and eye damage.

Precautionary statements:

P260 Do not breathe dusts or mists.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

---

|                      |                                                    |                    |
|----------------------|----------------------------------------------------|--------------------|
| Formula:             | 6-(4'-CYANOBIHENYL-4-YLOXY)-<br>HEXYL METHACRYLATE | $C_{23}H_{25}NO_3$ |
| Synonym:             | 6-[4-(4-Cyanophenyl)phenoxy]hexyl<br>methacrylate  |                    |
| Concentration:       | > 99%                                              |                    |
| CAS registry number: | 117318-91-9                                        |                    |

### 4. FIRST AID MEASURES

---

|                          |                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| General advice:          | Consult a physician. Show this material safety data sheet to the doctor in attendance. Move out of dangerous area.                                      |
| If inhaled:              | If breathed in, move person into fresh air. If not breathing, give artificial respiration.                                                              |
| In case of skin contact: | Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician. |
| In case of eye contact:  | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.              |
| If swallowed:            | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician                              |

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

## 5. FIRE-FIGHTING MEASURES

---

|                                                |                                                                                                                  |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Suitable extinguishing media:                  | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.                                         |
| Special protective equipment for firefighters: | Wear self contained breathing apparatus for firefighting if necessary.                                           |
| Hazardous combustion products:                 | Hazardous decomposition products formed under fire conditions: Carbon oxides, Nitrogen oxides (NO <sub>x</sub> ) |
| Explosion data:                                | Sensitivity to mechanical impact: no data available<br>Sensitivity to static discharge: no data available        |

## 6. ACCIDENTAL RELEASE MEASURES

---

|                                                        |                                                                                                                                                                                                                                   |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions:                                  | Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas.<br><br>Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.<br><br>For personal protection see section 8. |
| Environmental precautions:                             | Prevent further leakage or spillage if safe to do so. Do not let product enter drains.                                                                                                                                            |
| Methods and materials for containment and cleaning up: | Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal..                                                                                                       |

## 7. HANDLING AND STORAGE

---

|                                |                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling: | Avoid contact with skin and eyes. Avoid formation of dust and aerosols.<br><br>Provide appropriate exhaust ventilation at places where dust is formed.<br>Normal measures for preventive fire protection.<br><br>Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.<br><br>For precautions see section 2.2 |
| Conditions for safe storage:   | Keep container tightly closed in a dry and well-ventilated place.<br><br>Recommended storage temperature 2 - 8 °C<br><br>Air, light, and moisture sensitive. Store under inert gas. Heat sensitive.<br><br>Storage class (TRGS 510): 6.1D: Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects.                |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

---

|                                |                                                                                                                                                                                                                                                                                                                        |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal protective equipment: |                                                                                                                                                                                                                                                                                                                        |
| • Respiratory protection:      | Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and |

components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

- Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- Eye protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- Body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
- Specific engineering controls: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

|              |                                         |                                                      |
|--------------|-----------------------------------------|------------------------------------------------------|
| Appearance:  | Form:                                   | solid                                                |
|              | Colour:                                 | no data available                                    |
| Safety data: | pH:                                     | no data available                                    |
|              | Melting point / Freezing point:         | Melting point/range: 73 - 76 °C (163 - 169 °F) - lit |
|              | Boling point:                           | no data available                                    |
|              | Flash point:                            | no data available                                    |
|              | Ignition temperature:                   | no data available                                    |
|              | Auto-ignition temperature:              | no data available                                    |
|              | Lower explosion limit:                  | no data available                                    |
|              | Upper explosion limit:                  | no data available                                    |
|              | Vapour pressure:                        | no data available                                    |
|              | Density:                                | no data available                                    |
|              | Water solubility:                       | no data available                                    |
|              | Partition coefficient: n-octanol/water: | no data available                                    |
|              | Relative vapour density:                | no data available                                    |
|              | Odour:                                  | no data available                                    |
|              | Odour threshold:                        | no data available                                    |
|              | Evaporation rate:                       | no data available                                    |

## 10. STABILITY AND REACTIVITY

---

|                                     |                                                                        |
|-------------------------------------|------------------------------------------------------------------------|
| Chemical stability:                 | Stable under recommended storage conditions.                           |
| Possibility of hazardous reactions: | no data available                                                      |
| Conditions to avoid:                | Avoid moisture. Light                                                  |
| Materials to avoid:                 | Strong oxidizing agents, Oxygen, Strong reducing agents, Bases, acids. |
| Hazardous decomposition products:   | In the event of fire: see section 5.                                   |

## 11. TOXICOLOGICAL INFORMATION

---

|                                    |                                                                                                                                                                |                                          |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Acute toxicity:                    | Oral LD50:                                                                                                                                                     | 100 mg/kg                                |
|                                    | Inhalation LC50:                                                                                                                                               | 4 h - 1.5 mg/l (Acute toxicity estimate) |
|                                    | Dermal LD50:                                                                                                                                                   | 1,100 mg/kg                              |
|                                    | Other information on acute toxicity:                                                                                                                           | no data available                        |
| Skin corrosion/irritation:         | no data available                                                                                                                                              |                                          |
| Serious eye damage/eye irritation: | no data available                                                                                                                                              |                                          |
| Respiratory or skin sensitization: | no data available                                                                                                                                              |                                          |
| Germ cell mutagenicity:            | no data available                                                                                                                                              |                                          |
| Carcinogenicity:                   | no data available                                                                                                                                              |                                          |
| Reproductive toxicity:             | no data available                                                                                                                                              |                                          |
| Teratogenicity:                    | no data available                                                                                                                                              |                                          |
| Specific target organ toxicity:    | Single exposure (Globally Harmonized System):                                                                                                                  | no data available                        |
|                                    | Repeated exposure (Globally Harmonized System):                                                                                                                | no data available                        |
| Aspiration hazard:                 | no data available                                                                                                                                              |                                          |
| Additional information:            | Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea |                                          |

## 12. ECOLOGICAL INFORMATION

---

|                                |                   |
|--------------------------------|-------------------|
| Toxicity:                      | no data available |
| Persistence and degradability: | no data available |
| Bioaccumulative potential:     | no data available |
| Mobility in soil:              | no data available |
| PBT and vPvB assessment:       | no data available |
| Other adverse effects:         | no data available |

### 13. DISPOSAL CONSIDERATIONS

---

|                         |                                                                                                                                                                                                                                                                                                       |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product:                | Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.. |
| Contaminated packaging: | Dispose of as unused product.                                                                                                                                                                                                                                                                         |

### 14. TRANSPORT INFORMATION

---

|           |                                                                                                                                                                                                                                                 |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DOT (US): | UN number: 2923 Class: 8 (6.1) Packing group: III<br>Proper shipping name: CORROSIVE SOLID, TOXIC, N.O.S. (6-[4-(4'-Cyanophenyl)phenoxy]hexyl methacrylate)<br>Subsidiary risk : 6.1<br>Labels: 8<br>(6.1)ERG Code: 154<br>Marine pollutant: no |
| IMDG:     | UN number: 2923 Class: 8 (6.1) Packing group: III EMS-No: F-A, S-B<br>Proper shipping name: CORROSIVE SOLID, TOXIC, N.O.S. (6-[4-(4'-Cyanophenyl)phenoxy]hexyl methacrylate)                                                                    |
| IATA:     | UN number: 2923 Class: 8 (6.1) Packing group: III<br>Proper shipping name: Corrosive solid, toxic, n.o.s. (6-[4-(4'-Cyanophenyl)phenoxy]hexyl methacrylate).                                                                                    |

### 15. REGULATORY INFORMATION

---

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

### 16. OTHER INFORMATION

---

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Date of the latest revision: | 13 October 2021                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Further information:         | The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Polymer Source, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See <a href="http://www.polymersource.ca">www.polymersource.ca</a> for additional terms and conditions of sale. |