



Safety Data Sheet

Version 7.0
Revision Date: 12/02/2020

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **4-(Chloromethyl)benzoyl peroxide**
Product number: 4CIMBP
Product use: For laboratory research purposes.
Supplier / Manufacturer: Polymer Source, Inc.
Address: 124 Avro street, Dorval (Montreal), Quebec H9P 2X8, Canada
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Toll free: 1-866-422-9842
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2. HAZARDS IDENTIFICATION

Emergency overview: GHS classification: Organic peroxides (Type B), H241
Eye irritation (Category 2A), H319
Skin sensitization (Category 1), H317
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410

Globally Harmonized System (GHS) Label elements, including precautionary statements:

Pictogram:



Signal word:

Danger

Hazard statements:

H241. Heating may cause a fire or explosion.
H317. May cause an allergic skin reaction.
H319. Causes serious eye irritation.
H410. Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P210. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P234. Keep only in original packaging.
P240. Ground and bond container and receiving equipment.
P261. Avoid breathing dust, fume, gas, mist, vapours, spray.
P264. Wash skin thoroughly after handling.
P272. Contaminated work clothing should not be allowed out of the workplace.
P273. Avoid release to the environment.

- P280. Wear protective gloves, eye protection, face protection.
- P301 + P312 + P330. *IF SWALLOWED*: Rinse mouth. Call a Poison Center/Doctor if you feel unwell.
- P302 + P352. *IF ON SKIN*: Wash with plenty of water.
- P304 + P340 + P312. *IF INHALED*: Remove person to fresh air and keep comfortable for breathing. Call a Poison Center / doctor if you feel unwell.
- P305 + P351 + P338. *IF IN EYES*: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P333 + P313. *If skin irritation occurs*: Get medical advice / attention.
- P337 + P313. *If eye irritation persists*: Get medical advice/ attention.
- P362 + P364. Take off contaminated clothing and wash it before reuse.
- P370 + P380 + P375 + P378. *In case of fire*: Evacuate area. Fight fire remotely due to the risk of explosion. Use dry sand, dry chemical or alcohol resistant foam to extinguish.
- P391. Collect spillage.
- P403. Store in a well-ventilated place.
- P410. Protect from sunlight.
- P420. Store separately.
- P501. Dispose of contents/ container to an approved waste disposal plant.

Potential health effects:	Inhalation:	May be harmful if inhaled. May cause respiratory tract irritation.
	Skin:	Harmful if absorbed through skin. Causes skin irritation.
	Eyes:	Harmful if contact with eyes occurs. Causes serious eye irritation.
	Ingestion:	Harmful if swallowed.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance:	4-(Chloromethyl)benzoyl peroxide
Synonyms:	Peroxide, bis[4-(chloromethyl)benzoyl]; [4-(chloromethyl)benzoyl] 4-(chloromethyl)benzenecarboperoxoate; 4-(chloromethyl)benzoic peroxyanhydride
Formula:	C ₁₆ H ₁₂ Cl ₂ O ₄
Molecular weight:	339.17 g/mol
Concentration:	≤ 100 %
CAS registry number:	16173-49-2

4. FIRST AID MEASURES

General advice:	Consult a physician. Show this 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. Consult a physician.
In case of skin contact:	Wash off with soap and plenty of water. Consult a physician.
In case of eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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, Hydrogen chloride gas.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
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:	Sweep up and shovel. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and place in a container for disposal according to local regulations (see section 13). 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. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition – No smoking. Keep away from heat and sources of ignition.
Conditions for safe storage:	Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): 4.1A: Other explosive hazardous materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Use mechanical exhaust or laboratory fumehood to avoid exposure. Wash hands before breaks and at the end of workday.
- Personal protective equipment:
- Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full face 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).
 - Eye protection: S 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).
 - 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.
 - Body protection: Complete suit protecting against chemicals, 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: Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Form:	Solid / powder
	Colour:	White / colourless
Safety data:	pH:	no data available
	Melting point / Freezing point:	no data available
	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:	Heat, flames and sparks.
Materials to avoid:	Alcohols, metals, strong oxidizing agents.
Hazardous decomposition products:	Hazardous decomposition products formed under fire conditions: Carbon oxides, Hydrogen chloride gas. Other decomposition products: no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Oral LD50:	no data available
	Inhalation LC50:	no data available
	Dermal LD50:	no data available
	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:	IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
	ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
Reproductive toxicity:	no data available	
Teratogenicity:	no data available	
Specific target organ toxicity:	Single exposure (GHS):	no data available
	Repeated exposure (GHS):	no data available
Aspiration hazard:	no data available	
Potential health effects:	Inhalation:	May be harmful if inhaled. May cause respiratory tract irritation.
	Skin:	Harmful if absorbed through skin. Causes skin irritation.
	Eyes:	Harmful if contact with eyes occurs. Causes serious eye irritation.
	Ingestion:	Harmful if swallowed.

Signs and symptoms of exposure: Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

Additional information: RTECS: not available

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: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other adverse effects: no data available

13. DISPOSAL CONSIDERATIONS

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US): UN number: 3102
 Class: 5.2 (1)
 Packing group: II
 Proper shipping name: ORGANIC PEROXIDE TYPE B, SOLID
 (Peroxide, bis[4-(chloromethyl)benzoyl])
 Poison inhalation hazard: No

IMDG: UN number: 3102
 Class: 5.2 (1)
 EMS-No: F-J, S-R
 Proper shipping name: ORGANIC PEROXIDE TYPE B, SOLID
 (Peroxide, bis[4-(chloromethyl)benzoyl])

IATA: UN number: 3102
 Class: 5.2 (HEAT)
 Proper shipping name: ORGANIC PEROXIDE TYPE B, SOLID
 (Peroxide, bis[4-(chloromethyl)benzoyl])

15. REGULATORY INFORMATION

GHS classification: Organic peroxides (Type B), H241;
 Eye irritation (Category 2A), H319;
 Skin sensitization (Category 1), H317;
 Short-term (acute) aquatic hazard (Category 1), H400;
 Long-term (chronic) aquatic hazard (Category 1), H410.

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: 12 February 2020

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 www.polymersource.ca for additional terms and conditions of sale.