

Section 1. Product and Company Identification

**Product Name** Ethyl Bromopyruvate  
**CAS Number** 70-23-5

**Parchem - fine & specialty chemicals**  
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**New Rochelle, NY 10801**  
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Collect Calls Accepted

Section 2. Hazards Identification

**Classification of the substance or mixture**

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

**GHS Label Elements**

**Pictograms:**



**Signal word:** WARNING

**Hazard and precautionary statements**

**Hazard Statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

**Precautionary Statements**

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/eye protection/face protection.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.  
P321 Specific treatment (see supplemental first aid instructions on this label).  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before reuse.  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents/ container to an approved waste disposal plant.

**Hazards not otherwise classified (HNOC) or not covered by GHS:** None

#### Section 3. Composition / Information on Ingredients

<b>Common Name</b>	Ethyl Bromopyruvate
<b>Formula</b>	C <sub>5</sub> H <sub>7</sub> BrO <sub>3</sub>
<b>CAS Number</b>	70-23-5

#### Section 4. First Aid Measures

##### Description of first aid measures

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.  
Move out of dangerous area.

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.  
Consult a physician.

**Skin contact:** Wash off with soap and plenty of water. Consult a physician.

**Eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water.  
Consult a physician.

**Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in the labelling and/or in section 11.

**Indication of any immediate medical attention and special treatment needed:** no data available

#### Section 5. Firefighting Measures

##### Extinguishing media

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

**Special hazards arising from the substance or mixture:** Carbon oxides, Hydrogen bromide gas

**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

**Further information:** no data available

#### Section 6. Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:** Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

**Environmental precautions:** Do not let product enter drains.

**Methods and materials for containment and cleaning up:** Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**Reference to other sections:** For disposal see section 13.

#### Section 7. Handling and Storage

**Precautions for safe handling:** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Normal measures for preventive fire protection.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 2 - 8°C

#### Section 8. Exposure Controls / Personal Protection

##### Control parameters

**Components with workplace control parameters:** Contains no substances with occupational exposure limit values.

##### Exposure controls

**Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

##### Personal protective equipment

**Eye/face protection:** Safety glasses with side-shields conforming to EN166 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:** Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) 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).

**Control of environmental exposure:** Do not let product enter drains

Section 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**

**Appearance:** Liquid

**Odor:** No data available

**Odor Threshold:** No data available

**pH:** No data available

**Melting point/freezing point:** No data available

**Initial boiling point and boiling range:** 98 - 100°C (208 - 212°F) at 13 hPa (10 mmHg) - lit.

**Flash point (Closed Cup):** 99°C (210°F)

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Upper/lower flammability or explosive limits:** no data available

**Vapor pressure:** No data available

**Vapor density:** No data available

**Relative density:** 1.554 g/cm<sup>3</sup> at 25°C (77°F)

**Water solubility:** No data available

**Partition coefficient (n-Octanol/water):** No data available

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** No data available

**Explosive properties:** No data available

**Oxidizing properties:** No data available

**Other safety information:** no data available

Section 10. Stability and Reactivity

**Reactivity:** No data available

**Chemical stability:** Stable under recommended storage conditions.

**Possibility of hazardous reactions:** No data available

**Conditions to avoid:** No data available

**Incompatible materials:** Acids, Bases, Oxidizing agents, Reducing agents

**Hazardous decomposition products**

**Other decomposition products:** no data available

In the event of fire: see section 5

Section 11. Toxicological Information

**Information on toxicological effects**

**Acute toxicity:** No data available



**Dermal:** 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.  
**NTP:** No component of this product, present at levels greater than or equal to 0.1%, is identified as a known or anticipated carcinogen by NTP.  
**OSHA:** No component of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** No data available  
**Specific target organ toxicity - single exposure**  
Inhalation - May cause respiratory irritation.  
**Specific target organ toxicity - repeated exposure:** No data available  
**Aspiration hazard:** No data available

### **Additional Information**

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

## Section 12. Ecological Information

**Toxicity:** No data available  
**Persistence and degradability:** No data available  
**Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available  
**Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted  
**Other adverse effects:** No data available

## Section 13. Disposal Considerations

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

## Section 14. Transport Information

**DOT (US):** Not dangerous goods



**IMDG:** Not dangerous goods

**IATA:** Not dangerous goods

Section 15. Regulatory Information

**SARA 302 Components**

**SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

**SARA 313:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards:** Acute Health Hazard

**Massachusetts Right to Know Components:** No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right to Know Components**

Ethyl bromopyruvate (CAS-No. 70-23-5)

**New Jersey Right to Know Components**

Ethyl bromopyruvate (CAS-No. 70-23-5)

**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**HMIS Rating**

**Health:** 2

**Flammability:** 1

**Reactivity:** 0

**NFPA Rating**

**Health:** 2

**Flammability:** 1

**Reactivity:** 0

Section 16. Other Information

**Disclaimer:** 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.

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