

# MATERIAL SAFETY DATA SHEET

## Section 1 - Chemical Product and Company Identification

**MSDS Name:** Benzo(e)pyrene  
**Catalog Numbers:** AC105610000, AC105610250, AC105611000, AC329750000, AC329750250  
**Synonyms:** 4,5-Benzopyrene; 1,2-Benzpyrene.  
**Company Identification:** Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium  
**Company Identification: (USA)** Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410  
**For information in the US, call:** 800-ACROS-01  
**For information in Europe, call:** +32 14 57 52 11  
**Emergency Number, Europe:** +32 14 57 52 99  
**Emergency Number US:** 201-796-7100  
**CHEMTREC Phone Number, US:** 800-424-9300  
**CHEMTREC Phone Number, Europe:** 703-527-3887

## Section 2 - Composition, Information on Ingredients

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**CAS#:** 192-97-2  
**Chemical Name:** Benzo[e]pyrene  
**%:** >90  
**EINECS#:** 205-892-7  
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**Hazard Symbols:** T



**Risk Phrases:** 45 50/53

## Section 3 - Hazards Identification

### EMERGENCY OVERVIEW

Warning! May cause respiratory tract irritation. Cancer suspect agent. The toxicological properties of this material have not been fully investigated. May cause eye and skin irritation. Harmful if swallowed, inhaled, or absorbed through the skin. Target Organs: None known.

#### Potential Health Effects

**Eye:** May cause eye irritation.  
**Skin:** May cause skin irritation. Harmful if absorbed through the skin.  
**Ingestion:** Harmful if swallowed. May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.  
**Inhalation:** May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. Harmful if inhaled.  
**Chronic:** Laboratory experiments have resulted in mutagenic effects. Cancer suspect agent. This substance has caused adverse reproductive and fetal effects in laboratory animals.

## Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:**

**Section 5 - Fire Fighting Measures**

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Autoignition:** Not available.

**Temperature:**

**Flash Point:** Not available

**Explosion Limits:** Not available

**Lower:**

**Explosion Limits:** Not available

**Upper:**

**NFPA Rating:** health: 2; flammability: 0; instability: 0;

**Section 6 - Accidental Release Measures**

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

**Section 7 - Handling and Storage**

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

**Section 8 - Exposure Controls, Personal Protection**

**Engineering Controls:**  
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Benzo[e]pyrene listed	none listed	none listed	none listed

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OSHA Vacated PELs: Benzo[e]pyrene: None listed

**Personal Protective Equipment**

- Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
- Skin:** Wear appropriate protective gloves to prevent skin exposure.
- Clothing:** Wear appropriate protective clothing to prevent skin exposure.
- Respirators:** Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

**Section 9 - Physical and Chemical Properties**

**Physical State:** Crystalline powder  
**Color:** yellow-green  
**Odor:** None reported.  
**pH:** Not available  
**Vapor Pressure:** Not available  
**Vapor Density:** Not available  
**Evaporation Rate:** Not available  
**Viscosity:** Not available  
**Boiling Point:** Not available  
**Freezing/Melting Point:** 180.00 - 182.00 deg C  
**Decomposition Temperature:** Not available  
**Solubility in water:** Not available  
**Specific Gravity/Density:**  
**Molecular Formula:** C20H12  
**Molecular Weight:** 252.31

**Section 10 - Stability and Reactivity**

- Chemical Stability:** Stable under normal temperatures and pressures.
- Conditions to Avoid:** Incompatible materials, dust generation.
- Incompatibilities with Other Materials:** Not available
- Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.
- Hazardous Polymerization:** Has not been reported.

**Section 11 - Toxicological Information**

- RTECS#:** CAS# 192-97-2: DJ4200000
- LD50/LC50:** RTECS: Not available.
- Carcinogenicity:** Benzo[e]pyrene - NTP: Suspect carcinogen (Aromatic hydrocarbons, polycyclic). IARC: Group 3 (not classifiable)
- Epidemiology:** Mortality studies have demonstrated that exposure to coke oven emissions, which contain a variety of PAHs (Polycyclic aromatic hydrocarbons), caused increased incidences of lung and genitourinary cancer mortality in coke oven workers.
- Teratogenicity:** Teratogenic effects have occurred in experimental animals.
- Reproductive:** Adverse reproductive effects have occurred in experimental animals.
- Neurotoxicity:** No information found
- Mutagenicity:** Mutagenic effects have occurred in humans. Mutagenic effects have occurred in experimental animals.
- Other:** The hazard classification for this product is based on supplier information. See actual entry in RTECS for complete information.

**Section 12 - Ecological Information**

**Other:**

### Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None listed.

### Section 14 - Transport Information

US DOT

Shipping Name: TOXIC SOLID, ORGANIC, N.O.S. (Benzo (e) pyrene)

Hazard Class: 6.1

UN Number: UN2811

Packing Group: III

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

### Section 15 - Regulatory Information

#### US Federal

##### TSCA

CAS# 192-97-2 is not listed on the TSCA Inventory. It is for research and development use only.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules Section 12b

None of the chemicals in this product are under a Chemical Test Rule.

#### TSCA Significant New Use Rule

None of the chemicals are listed under TSCA Section 12b.

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### Section 313

No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

#### STATE

Benzo[e]pyrene can be found on the following state right to know lists: Minnesota, (listed as Aromatic hydrocarbons, polycyclic).

#### California Prop 65

#### California No Significant Risk Level:

None of the chemicals in this product are listed.

#### European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 45 May cause cancer.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 53 Avoid exposure - obtain special instructions before use.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 60 This material and its container must be disposed of as hazardous waste.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 192-97-2: Not available

Canada

Canadian WHMIS Classifications: D2A, D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 192-97-2 is not listed on Canada's Ingredient Disclosure List.

## Section 16 - Other Information

**MSDS Creation Date:** 9/02/1997

**Revision #5 Date** 7/11/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.