



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
HPR, Schedule 1

Revision date 19-Sep-2024

Revision Number 1.01

## 1. Identification

### Product identifier

**Product Name** Benzo[c]phenanthrene

### Other means of identification

**Product Code(s)** TRC-B121900-10MG

### Recommended use of the chemical and restrictions on use

**Recommended use** Laboratory use

**Restrictions on use** No information available

### Details of the supplier of the safety data sheet

#### Initial supplier identifier

Toronto Research Chemicals  
2 Brisbane Road  
Toronto, ON  
M3J 2J8

Emergency number: +1(416) 665-9696 between 0800-1700 (GMT-5)

Fax: +14166654439

Web: [www.trc-canada.com](http://www.trc-canada.com)

**E-mail** [sds-request@lgcgroup.com](mailto:sds-request@lgcgroup.com)

### Emergency telephone number

#### **Emergency Telephone**

For Hazardous Materials or Dangerous Goods Incident

Spill, Leak, Fire Exposure, or Accident

Call CHEMTREC:

USA & Canada 1-800-424-9300

Rest of the world +1 703-741-3877

## 2. Hazard identification

### Classification

Classification according to WHIMIS

Acute toxicity - Oral	Category 4
Carcinogenicity	Category 2
Acute aquatic toxicity	Category 1



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Chronic aquatic toxicity	Category 1
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## Label elements

### Warning

### Hazard statements

Classification according to WHIMIS  
Harmful if swallowed  
Suspected of causing cancer  
Very toxic to aquatic life with long lasting effects



### Precautionary Statements - Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Wear protective gloves, protective clothing, eye protection and face protection  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Avoid release to the environment

### Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

#### Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
Rinse mouth

#### Spill

Collect spillage

### Precautionary Statements - Storage

Store locked up

### Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant

### Other information

No information available.

## 3. Composition/information on ingredients

### Substance



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Formula

C<sub>18</sub>H<sub>12</sub>

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Benzo[c]phenanthrene	195-19-7	90 - 100%	-	

## 4. First-aid measures

### Description of first aid measures

**General advice**

Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

**Inhalation  
Eye contact**

Remove to fresh air.  
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.  
Consult a doctor.

**Skin contact**

Wash skin with soap and water.

**Ingestion**

Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor.

### Most important symptoms and effects, both acute and delayed

**Symptoms**

No information available.

### Indication of any immediate medical attention and special treatment needed

**Note to doctors**

Treat symptomatically.

## 5. Fire-fighting measures

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Large Fire**

CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media**

Do not scatter spilled material with high pressure water streams.

**Specific hazards arising from the chemical**

No information available.

**Explosion data**



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**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation.

**Other information** Refer to protective measures listed in Sections 7 and 8.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labelled containers.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

## 8. Exposure controls/personal protection

### Control parameters

**Exposure Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.



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## Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

## Individual protection measures, such as personal protective equipment

**Eye/face protection** Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374. Wear protective nitrile rubber or Viton™ gloves.

**Skin and body protection** Wear suitable protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

## **9. Physical and chemical properties**

### Information on basic physical and chemical properties

**Physical state** Solid  
**Appearance** Solid  
**Colour** white to yellow  
**Odour** No information available  
**Odour threshold** No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	68 °C / 154.4 °F	None known
Initial boiling point and boiling range	436.7 °C / 818.06 °F	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapour pressure	No data available	None known
Relative vapour density	No data available	None known



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Relative density	1.19	None known
Water solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

## Other information

Explosive properties	No information available.
Oxidising properties	No information available.
Softening point	No information available
Molecular weight	228.29
VOC content	No information available
Liquid Density	No information available
Bulk density	No information available

## 10. Stability and reactivity

### Reactivity

No information available.

### Chemical stability

Stable under normal conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to avoid

None known based on information supplied.

### Incompatible materials

None known based on information supplied.

**Hazardous decomposition products** None known based on information supplied.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available. Harmful if swallowed. (based



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on components).

## Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

## Acute toxicity

**Numerical measures of toxicity**  
No information available

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitisation** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Benzo[c]phenanthrene 195-19-7	-	Group 2B	-	X

### Legend

**IARC (International Agency for Research on Cancer)**

Group 2B - Possibly Carcinogenic to Humans

**OSHA (Occupational Safety and Health Administration of the US Department of Labour)**

X - Present

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.



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Aspiration hazard No information available.

## 12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Persistence and degradability No information available.

Bioaccumulation No information available.

Other adverse effects No information available.

## 13. Disposal considerations

### Disposal methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

## 14. Transport information

### TDG

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s. (Benzo[c]phenanthrene)
Transport hazard class(es)	9
Packing group	III
Special Provisions	16, 99
Description	UN3077, Environmentally hazardous substances, solid, n.o.s. (Benzo[c]phenanthrene), 9, III

### DOT

UN number or ID number	UN3077
Extended proper shipping name	Environmentally hazardous substances, solid, n.o.s. (Benzo[c]phenanthrene)
Transport hazard class(es)	9
Packing group	III
DOT Marine Pollutant	I.
Marine pollutant	Benzo[c]phenanthrene
Description	UN3077, Environmentally hazardous substances, solid, n.o.s. (Benzo[c]phenanthrene), 9,



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<b>Special Provisions</b>	III, Marine pollutant
<b>Emergency Response Guide Number</b>	8, 146, 335, 384, 441, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33 171
<b>MEX</b>	
<b>UN number or ID number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substances, solid, n.o.s. (Benzo[c]phenanthrene)
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Description</b>	UN3077, Environmentally hazardous substances, solid, n.o.s. (Benzo[c]phenanthrene), 9, III
<b>Special Provisions</b>	274, 331, 335, 375
<b>IATA</b>	
<b>UN number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substances, solid, n.o.s. (Benzo[c]phenanthrene)
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>ERG Code</b>	9L
<b>Special Provisions</b>	A97, A158, A179, A197, A215
<b>Description</b>	UN3077, Environmentally hazardous substances, solid, n.o.s. (Benzo[c]phenanthrene), 9, III
<b>IMDG</b>	
<b>UN number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substances, solid, n.o.s. (Benzo[c]phenanthrene)
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>EmS-No.</b>	F-A, S-F
<b>Special Provisions</b>	274, 335, 966, 967, 969
<b>Marine pollutant</b>	P
<b>Description</b>	UN3077, Environmentally hazardous substances, solid, n.o.s. (Benzo[c]phenanthrene), 9, III, Marine pollutant

## 15. Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

#### International Inventories

##### **TSCA**

LGC has not confirmed that the chemical substances in this product are on the TSCA Inventory, and LGC is distributing this product solely for use either in applications statutorily



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exempt from TSCA and regulated under other laws (e.g., FFCA, FIFRA) or in research and development activities in accordance with the TSCA Inventory R&D exemption provided at 40 CFR 720.36. It is the end-user's responsibility to understand and follow the requirements that apply to its use of this product.

**DSL/NDSL**

Contact supplier for inventory compliance status.

**EINECS/ELINCS**

Contact supplier for inventory compliance status.

**ENCS**

Contact supplier for inventory compliance status.

**IECSC**

Contact supplier for inventory compliance status.

**KECI**

Contact supplier for inventory compliance status.

**PICCS**

Contact supplier for inventory compliance status.

**AIC**

Contact supplier for inventory compliance status.

## Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECI** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

## 16. Other information

**NFPA**

**Health hazards** 2

**Flammability** 0

**Instability** 0

**Special hazards** -

**HMIS**

**Health hazards** \* 2

**Flammability** 0

**Physical hazards** 0

**Personal protection** X

Chronic Hazard Star Legend

\* = Chronic Health Hazard

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average)

STEL

STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

Sk\*

Skin designation

#### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGl(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)



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National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Revision date** 19-Sep-2024

**Revision Note** No information available.

**Disclaimer**

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety or performance considerations may arise when using, handling and/ or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. LGC makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

**End of Safety Data Sheet**