

Benzo[*a*]pyrene-d₁₂

Section 1. Chemical product and company identifications

Product code: D-1956
Chemical formula: C₂₀D₁₂
CAS: 63466-71-7
CAS (unlabelled): 50-32-8
Synonyms: 3,4-Benzopyrene

Supplier / Manufacturer:

C/D/N Isotopes Inc.
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TOXYSCAN HOTLINE: 1-855-780-0599


Section 2. Hazards identifications

GHS (Globally Harmonized System of Classification and Labelling of Chemicals):

GHS Classification:

- Skin sensitization (Category 1)
- Germ cell mutagenicity (Category 1B)
- Carcinogenicity (Category 1B)
- Reproductive toxicity (Category 1B)

GHS Label elements:

- Pictograms: 
- Signal word: Danger

Hazards statement:

- H317 May cause an allergic skin reaction.
- H340 May cause genetic defects.
- H350 May cause cancer.
- H360 May damage fertility or the unborn child.

Precautionary statement:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P281 Use personal protective equipment as required.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention.
- P362 Take off contaminated clothing and wash before reuse.
- P405 Store locked up.
- P501 Dispose of contents/ container to an approved waste disposal plant.

Section 3. Composition and information on ingredients

<u>Name</u>	<u>CAS</u>	<u>Concentration %</u>
Benzo[<i>a</i>]pyrene-d ₁₂	63466-71-7	98-100%

Section 4. First aid measures

Eye contact: Flush eyes with water as a precaution.

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

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

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

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

Indication of immediate medical attention and special treatment needed, if necessary: No data available

Most important symptoms and effects, both acute and delayed: No data available.

Section 5. Firefighting measures

Flammability of the product: Not flammable or combustible.

Products of combustion: Hazardous decomposition products formed under fire conditions: Carbon oxides.

Firefighting media and instructions: 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.

Section 6. Accidental release measures

Personal precautions: Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Avoid breathing dust.

Environmental precautions: Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up: Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

Section 7. Handling and storage

Handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation.

Storage: Store at room temperature. Adequate ventilation.

Section 8. Exposure Controls, Personal Protections

Engineering controls: Use mechanical exhaust or laboratory fumehood to avoid exposure.

Eyes: Safety glasses with side-shields conforming to NIOSH (US) or EN 166 (EU).

Respiratory: 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)

Hands: Handle with gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Skin/body: Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Section 9. Physical and chemical properties (unlabelled)

Molecular weight: 252.31 g/mol

Physical status: Solid

Color: Yellow

Density: No data available

Melting point: 177 - 180 °C (351 - 356 °F)

Boiling point: 495 °C (923 °F)

Vapour pressure: No data available

Vapour density: No data available

Partition coefficient (octanol/water): log Pow: 6.13

Water solubility: Insoluble

Lower explosion limit: No data available

Upper explosion limit: No data available

Auto-ignition temperature: No data available

Flash point: No data available

Section 10. Stability and reactivity

Stability and reactivity: Stable under recommended storage conditions.

Incompatibility: Strong oxidizing agents.

Products of combustion: Hazardous decomposition products formed under fire conditions: Carbon oxides.

Reactivity conditions: No data available

Section 11. Toxicological information (unlabelled)

Information on ingredients:

<u>Name</u>	<u>CAS</u>	<u>LD₅₀</u>	<u>LC₅₀</u>
Benzo[<i>a</i>]pyrene	50-32-8	Subcutaneous - Rat - 50 mg/kg	No data available

Potential acute effects

- **Eyes:** No data available.
- **Skin:** May cause an allergic skin reaction.
- **Inhalation:** No data available.
- **Ingestion:** No data available.

Potential chronic effects

- **Carcinogenic effects:** This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen. IARC: 1 - Group 1: Carcinogenic to humans (Benzo[*a*]pyrene).
- **Mutagenic effects:** May alter genetic material. In vivo tests showed mutagenic effects
- **Teratogenic effects:** May cause congenital malformation in the fetus. Presumed human reproductive toxicant.
- **Medical conditions aggravated by overexposure:** No data available.

Section 12. Ecological information

Ecological data:

<u>Name</u>	<u>Results</u>	<u>Species</u>	<u>Period</u>
Benzo[<i>a</i>]pyrene	0.25 mg/l EC50	Daphnia magna	48 h
	0.02 mg/l EC50	Pseudokirchneriella subcapitata	72 h

Effects on environment: No data available.

Mobility: No data available.

Environmental precautions: No data available

Persistence and degradability: No data available

Bioaccumulative potential: Lepomis macrochirus - 48 h - 0.0005 mg/l. Bioconcentration factor (BCF): 3,208

Section 13. Disposal considerations

Waste disposal: Contact a licensed professional waste disposal service to dispose of this material.

Section 14. Transportation information

Classification DOT/IMDG/IATA label:

Shipping name: Not dangerous goods

UN number: None

Class: None

Packaging group: None

Additional information: None

Section 15. Regulatory information

UNITED STATES: NFPA classification



Health: 3
Flammable: 0
Reactivity: 0
Special conditions: None

Legend: 4: Severe, 3: High, 2: Moderate, 1: Slightly, 0: Not hazardous

U.S. Federal regulations:

California proposition 65 requirements : Listed

SARA section 313 (specific toxic chemical listings) : Listed

CERCLA reportable quantity : Listed

Sections 302-304 reportable quantity : Listed

Community Right-to-Know (Sections 311 and 312) : Listed

Section 16. Additional information

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Elaborated by: Toxyscan Inc., 1-866-780-0599

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This safety data sheet has been prepared in accordance with the OSHA (USA), WHMIS (Canada) / GHS classification rules in effect at the time of writing.