

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : Benzo(b)fluoranthene Standard  
Product code : AL0-101562  
Product group : Trade product

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Main use category : Laboratory Use  
Industrial/Professional use spec : Industrial  
For professional use only

##### 1.2.2. Uses advised against

No additional information available

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

Phenova  
6390 Joyce Dr. Suite 100  
80403 Golden, CO - United States  
T 1-866-942-2978 - F 1-866-283-0269  
[info@phenova.com](mailto:info@phenova.com) - [www.phenova.com](http://www.phenova.com)

#### 1.4. Emergency telephone number

Emergency number : ChemTel Assistance (US/Canada) 1-800-255-3924  
ChemTel Assistance (International) +1 813-248-0585

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Carc. 1B H350

##### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc.Cat.2; R45

Full text of R-phrases: see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) : Danger  
Hazardous ingredients : Benzo(b)fluoranthene  
Hazard statements (CLP) : H350 - May cause cancer  
Precautionary statements (CLP) : P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P308+P313 - IF exposed or concerned: Get medical advice/attention  
P271 - Use only outdoors or in a well-ventilated area  
P403+P235 - Store in a well-ventilated place. Keep cool

No labeling applicable

#### 2.3. Other hazards

No additional information available

# Benzo(b)fluoranthene Standard

## Safety Data Sheet

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

| Name                                | Product identifier   | %    | Classification according to Regulation (EC) No. 1272/2008 [CLP]    |
|-------------------------------------|--|------|--|
| Methylene Chloride                  | (CAS No) 75-09-2<br>(EC no) 200-838-9<br>(EC index no) 602-004-00-3  | 99.8 | Carc. 2, H351  |
| Benzo(b)fluoranthene<br>(Component) | (CAS No) 205-99-2<br>(EC no) 205-911-9<br>(EC index no) 601-034-00-4 | 0.2  | Carc. 1B, H350<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

No additional information available

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

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up in absorbent material. Collect spillage.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

# Benzo(b)fluoranthene Standard

## Safety Data Sheet

Hygiene measures : Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.

Incompatible materials : Direct sunlight.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Appropriate engineering controls : Either local exhaust or general room ventilation is usually required.

Personal protective equipment : Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.



Hand protection : Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.

Eye protection : Chemical goggles or safety glasses. Safety glasses.

Skin and body protection : Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : Colorless.

Odor : characteristic.

pH : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : Non flammable

Relative density : No data available

Solubility : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Explosion limits : No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Not established.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

# Benzo(b)fluoranthene Standard

## Safety Data Sheet

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

| Methylene Chloride (75-09-2) |   |
|------------------------------|---|
| LD50 oral rat                | > 2000 mg/kg (Rat; Literature study)    |
| LD50 dermal rabbit           | > 2000 mg/kg (Rabbit; Literature study) |

Skin corrosion/irritation : Not classified  
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified  
Based on available data, the classification criteria are not met

Respiratory or skin sensitization : Not classified  
Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified  
Based on available data, the classification criteria are not met

Carcinogenicity : May cause cancer.  
May cause cancer

Reproductive toxicity : Not classified  
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified  
Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure) : Not classified  
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified  
Based on available data, the classification criteria are not met

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

| Methylene Chloride (75-09-2) |  |
|------------------------------|--|
| LC50 fish 1                  | 193 mg/l (LC50; 96 h; Pimephales promelas) |
| EC50 Daphnia 1               | 168.2 mg/l (EC50; 48 h)                    |

### 12.2. Persistence and degradability

| Benzo(b)fluoranthene Standard |                  |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

| Benzo(b)fluoranthene (205-99-2) |   |
|---------------------------------|---|
| Persistence and degradability   | Not readily biodegradable in water. Photolysis in water. Forming sediments in water. Non degradable in the soil. Adsorbs into the soil. |
| ThOD                            | 2.92 g O /g substance   |

| Methylene Chloride (75-09-2)  |  |
|-------------------------------|--|
| Persistence and degradability | Not readily biodegradable in water. Biodegradable in the soil. |

### 12.3. Bioaccumulative potential

| Benzo(b)fluoranthene Standard |                  |
|-------------------------------|------------------|
| Bioaccumulative potential     | Not established. |

| Benzo(b)fluoranthene (205-99-2) |   |
|---------------------------------|---|
| BCF other aquatic organisms 1   | 2800 (BCF; 168 h)                                 |
| Log Pow                         | 6.57  |
| Bioaccumulative potential       | High potential for bioaccumulation (Log Kow > 5). |

| Methylene Chloride (75-09-2) |                           |
|------------------------------|---------------------------|
| BCF fish 1                   | 2 - 40 (BCF)              |
| Log Pow                      | 1.25 (Experimental value) |

# Benzo(b)fluoranthene Standard

## Safety Data Sheet

|                                     |  |
|-------------------------------------|--|
| <b>Methylene Chloride (75-09-2)</b> |  |
| Bioaccumulative potential           | Low potential for bioaccumulation (BCF < 500). |

### 12.4. Mobility in soil

|                                     |   |
|-------------------------------------|---|
| <b>Methylene Chloride (75-09-2)</b> |   |
| Surface tension                     | 0.028 N/m (20 °C)   |
| Ecology - soil                      | May be harmful to plant growth, blooming and fruit formation. |

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Additional information : Avoid release to the environment

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No. (ADR) : 2810  
UN-No.(IATA) : 2810

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : TOXIC LIQUID, ORGANIC, N.O.S.  
Proper Shipping Name (IATA) : TOXIC LIQUID, ORGANIC, N.O.S.  
Transport document description (ADR) : UN 2810 TOXIC LIQUID, ORGANIC, N.O.S., 6.1, III, (E)

### 14.3. Packing group

Class (ADR) : 6.1  
Classification code (ADR) : T1  
Class (IATA) : 6.1  
Hazard labels (ADR) : 6.1



Hazard labels (IATA) : 6.1



### 14.4. Packing group

Packing group (ADR) : III  
Packing group (IATA) : III

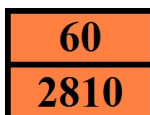
### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

#### 14.6.1. Overland transport

Hazard identification number (Kemler No.) : 60  
Classification code (ADR) : T1  
Orange plates :



Special provision (ADR) : 274, 614  
Transport category (ADR) : 2  
Tunnel restriction code (ADR) : E

# Benzo(b)fluoranthene Standard

## Safety Data Sheet

Limited quantities (ADR) : 5I  
Excepted quantities (ADR) : E1

### 14.6.2. Transport by sea

No additional information available

### 14.6.3. Air transport

CAO packing instructions (IATA) : 663  
CAO max net quantity (IATA) : 220L  
PCA packing instructions (IATA) : 655  
PCA Limited quantities (IATA) : Y642  
PCA limited quantity max net quantity (IATA) : 2L  
PCA max net quantity (IATA) : 60L  
PCA Excepted quantities (IATA) : E1  
Special provision (IATA) : A137  
ERG code (IATA) : 6L

### 14.6.4. Inland waterway transport

Carriage prohibited (ADN) : No

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions  
Contains no REACH candidate substance  
Contains no REACH Annex XIV substances.

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

PHV SDS EU

Copyright 2015 Phenova, Inc. License granted to make paper copies for internal use. The information contained in this Safety Data Sheet is based on our current knowledge. The information contained in this document should be used only as a guide for appropriate safety precautions and should not be considered to be all inclusive. Users should make their own investigation to determine the suitability of the information for their particular purposes. The document does not represent any guarantee of the properties of the product. Phenova, Inc. shall not be held liable for any damage resulting from the handling or use of this product. Visit the Terms and Conditions of Sale link at [www.phenova.com](http://www.phenova.com) for additional terms and conditions of sale.