

# 610 PAH Mix 2

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 27/10/2017

Revision date: \_\_\_\_\_

Version: 1.0

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : 610 PAH Mix 2  
Product code : AL0-101505  
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]

Acute Tox. 4 (Dermal)	H312
Acute Tox. 4 (Inhalation)	H332
Carc. 1B	H350
Aquatic Acute 1	H400
Aquatic Chronic 2	H411

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

Carc.Cat.2; R45  
Xn; R20/21  
N; R50/53  
Full text of R-phrases: see section 16

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

No additional information available

#### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

GHS08

GHS09

Signal word (CLP) : Danger  
Hazardous ingredients : acenaphthylene; benzo[a]pyrene; dibenz(a,h)anthracene  
Hazard statements (CLP) : H312+H332 - Harmful in contact with skin or if inhaled  
H350 - May cause cancer

# 610 PAH Mix 2

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Precautionary statements (CLP)	H410 - Very toxic to aquatic life with long lasting effects : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P261 - Avoid breathing dust/fume/gas/mist/vapours/spray P271 - Use only outdoors or in a well-ventilated area P273 - Avoid release to the environment P280 - Wear protective gloves/protective clothing/eye protection/face protection P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P308+P313 - IF exposed or concerned: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P391 - Collect spillage P403+P235 - Store in a well-ventilated place. Keep cool P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation
--------------------------------	--

No labelling applicable

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Methylene Chloride (Component)	(CAS-No.) 75-09-2 (EC-No.) 200-838-9 (EC Index-No.) 602-004-00-3	99.42	Carc. 2, H351
acenaphthylene (Component)	(CAS-No.) 208-96-8 (EC-No.) 205-917-1	0.2	Acute Tox. 1 (Dermal), H310
acenaphthene (Component)	(CAS-No.) 83-32-9 (EC-No.) 201-469-6	0.1	Eye Irrit. 2, H319 Aquatic Chronic 2, H411
naphthalene (Component)	(CAS-No.) 91-20-3 (EC-No.) 202-049-5 (EC Index-No.) 601-052-00-2	0.1	Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
benzo(ghi)perylene (Component)	(CAS-No.) 191-24-2 (EC-No.) 205-883-8	0.02	Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410
fluoranthene (Component)	(CAS-No.) 206-44-0 (EC-No.) 205-912-4	0.02	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
dibenz(a,h)anthracene (Component)	(CAS-No.) 53-70-3 (EC-No.) 200-181-8 (EC Index-No.) 601-041-00-2	0.02	Carc. 1B, H350 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410
anthracene (Component) substance listed as REACH Candidate	(CAS-No.) 120-12-7 (EC-No.) 204-371-1	0.01	Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
benzo[a]pyrene (Component) substance listed as REACH Candidate (Benzo[def]chrysene)	(CAS-No.) 50-32-8 (EC-No.) 200-028-5 (EC Index-No.) 601-032-00-3	0.01	Skin Sens. 1, H317 Muta. 1B, H340 Carc. 1B, H350 Repr. 1B, H360FD Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
benzo[a]anthracene (Component)	(CAS-No.) 56-55-3 (EC-No.) 200-280-6 (EC Index-No.) 601-033-00-9	0.01	Carc. 1B, H350 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
chrysene (Component)	(CAS-No.) 218-01-9 (EC-No.) 205-923-4 (EC Index-No.) 601-048-00-0	0.01	Muta. 2, H341 Carc. 1B, H350 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=1000)
benzo[k]fluoranthene (Component)	(CAS-No.) 207-08-9 (EC-No.) 205-916-6 (EC Index-No.) 601-036-00-5	0.01	Carc. 1B, H350 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
pyrene (Component)	(CAS-No.) 129-00-0 (EC-No.) 204-927-3	0.01	Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
Name	Product identifier	Specific concentration limits	
dibenz(a,h)anthracene (Component)	(CAS-No.) 53-70-3 (EC-No.) 200-181-8 (EC Index-No.) 601-041-00-2	(C >= 0.01) Carc. 1B, H350	

# 610 PAH Mix 2

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Name	Product identifier	Specific concentration limits
benzo[a]pyrene (Component)	(CAS-No.) 50-32-8 (EC-No.) 200-028-5 (EC Index-No.) 601-032-00-3	(C >= 0.01) Carc. 1B, H350

### 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 : Assure fresh air breathing. 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. Immediately call a POISON CENTER or doctor/physician. Wash with plenty of soap and water. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
- 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

- Symptoms/effects after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.

#### 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 the 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. Avoid release to the environment.

#### 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 vapour. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
- 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.

# 610 PAH Mix 2

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<b>benzo[a]pyrene (50-32-8)</b>		
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	550 (Benzo(a)pyreen; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
<b>naphthalene (91-20-3)</b>		
EU	IOELV TWA (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup> (Naphtalene; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
EU	IOELV TWA (ppm)	10 ppm (Naphtalene; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
Belgium	Limit value (mg/m <sup>3</sup> )	53 mg/m <sup>3</sup> (Naphtalène; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Limit value (ppm)	10 ppm (Naphtalène; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Short time value (mg/m <sup>3</sup> )	80 mg/m <sup>3</sup> (Naphtalène; Belgium; Short time value)
Belgium	Short time value (ppm)	15 ppm (Naphtalène; Belgium; Short time value)
France	VME (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup> (Naphtalène; France; Time-weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative)
France	VME (ppm)	10 ppm (Naphtalène; France; Time-weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative)
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	10 ppm (Naphthalene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup> (Naftaleen; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
Netherlands	Grenswaarde TGG 8H (ppm)	9.4 ppm (Naftaleen; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
Netherlands	Grenswaarde TGG 15MIN (mg/m <sup>3</sup> )	80 mg/m <sup>3</sup> (Naftaleen; Netherlands; Short time value; Public occupational exposure limit value)
Netherlands	Grenswaarde TGG 15MIN (ppm)	15 ppm (Naftaleen; Netherlands; Short time value; Public occupational exposure limit value)
<b>Methylene Chloride (75-09-2)</b>		
Belgium	Limit value (mg/m <sup>3</sup> )	177 mg/m <sup>3</sup> (Chlorure de méthylène; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Limit value (ppm)	50 ppm (Chlorure de méthylène; Belgium; Time-weighted average exposure limit 8 h)
France	VLE (mg/m <sup>3</sup> )	356 mg/m <sup>3</sup> (Dichlorométhane; France; Short time value; VRC: Valeur réglementaire contraignante)
France	VLE (ppm)	100 ppm (Dichlorométhane; France; Short time value; VRC: Valeur réglementaire contraignante)
France	VME (mg/m <sup>3</sup> )	178 mg/m <sup>3</sup> (Dichlorométhane; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
France	VME (ppm)	50 ppm (Dichlorométhane; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	50 ppm (Dichloromethane (Methylene chloride); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	350 mg/m <sup>3</sup> Dichloromethane; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL TWA (ppm)	100 ppm Dichloromethane; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	1060 mg/m <sup>3</sup> Dichloromethane; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)

# 610 PAH Mix 2

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Methylene Chloride (75-09-2)		
United Kingdom	WEL STEL (ppm)	300 ppm Dichloromethane; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)

### 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
- Colour : Colourless.
- Odour : 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
- Oxidising properties : No data available
- Explosive 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.

### 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 : Dermal: Harmful in contact with skin. Inhalation: Harmful if inhaled.

# 610 PAH Mix 2

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

<b>610 PAH Mix 2</b>	
ATE CLP (dermal)	1100 mg/kg bodyweight
ATE CLP (gases)	4500 ppmv/4h
ATE CLP (vapours)	11 mg/l/4h
ATE CLP (dust,mist)	1.5 mg/l/4h
<b>acenaphthene (83-32-9)</b>	
LD50 oral rat	> 5000 mg/kg (Rat)
<b>acenaphthylene (208-96-8)</b>	
ATE CLP (dermal)	5 mg/kg bodyweight
<b>anthracene (120-12-7)</b>	
LD50 oral rat	> 16000 mg/kg (Rat)
<b>fluoranthene (206-44-0)</b>	
LD50 oral rat	2000 mg/kg (Rat)
LD50 dermal rabbit	3180 mg/kg (Rabbit)
ATE CLP (oral)	2000 mg/kg bodyweight
ATE CLP (dermal)	3180 mg/kg bodyweight
<b>naphthalene (91-20-3)</b>	
LD50 oral rat	> 1100 mg/kg (Rat)
LD50 dermal rat	> 2500 mg/kg (Rat)
LD50 dermal rabbit	> 20000 mg/kg (Rabbit)
ATE CLP (oral)	500 mg/kg bodyweight
<b>pyrene (129-00-0)</b>	
LD50 oral rat	2700 mg/kg (Rat)
ATE CLP (oral)	2700 mg/kg bodyweight
<b>Methylene Chloride (75-09-2)</b>	
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 sensitisation	: 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
STOT-single exposure	: Not classified Based on available data, the classification criteria are not met
STOT-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	: Harmful in contact with skin.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water : Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

<b>acenaphthene (83-32-9)</b>	
EC50 Daphnia 1	3.45 mg/l (EC50; 48 h)
<b>anthracene (120-12-7)</b>	
LC50 fish 2	0.00127 mg/l (LC50; 96 h)
EC50 Daphnia 2	0.0012 mg/l (EC50; 24 h)

# 610 PAH Mix 2

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

<b>benzo[a]anthracene (56-55-3)</b>	
LC50 fish 1	0.0018 mg/l (LC50; 65 h)
EC50 Daphnia 1	0.01 mg/l (EC50; 96 h)
<b>benzo[a]pyrene (50-32-8)</b>	
LC50 fish 1	0.0056 mg/l (LC50; 38 h)
EC50 Daphnia 1	0.005 mg/l (LC50; 96 h)
Threshold limit algae 1	0.015 mg/l (EC50; 72 h)
<b>benzo(ghi)perylene (191-24-2)</b>	
EC50 Daphnia 1	0.0002 mg/l (LC50; 14 h)
<b>benzo[k]fluoranthene (207-08-9)</b>	
EC50 Daphnia 1	0.0048 mg/l (LC50; 23 h)
<b>chrysene (218-01-9)</b>	
EC50 Daphnia 1	0.0007 mg/l (LC50; 24 h)
Threshold limit algae 1	0.001 mg/l (EC0)
<b>dibenz(a,h)anthracene (53-70-3)</b>	
EC50 Daphnia 1	0.0004 mg/l (LC50; 3 h)
<b>fluoranthene (206-44-0)</b>	
LC50 fish 1	0.0077 mg/l (LC50; 96 h)
EC50 Daphnia 1	< 0.1 mg/l (EC50; 72 h)
Threshold limit algae 1	54 mg/l (EC50; 96 h)
<b>naphthalene (91-20-3)</b>	
EC50 Daphnia 1	2.16 mg/l (EC50; 48 h; Daphnia magna)
LC50 fish 2	0.11 mg/l (LC50; 96 h; Oncorhynchus mykiss)
Threshold limit algae 1	0.4 mg/l (EC50; 72 h; Skeletonema costatum)
<b>pyrene (129-00-0)</b>	
EC50 Daphnia 1	> 0.0057 mg/l (LC50; 3.4 h)
EC50 other aquatic organisms 1	1.6 mg/l (3 h; Chlorella vulgaris)
LC50 fish 2	0.0026 mg/l (LC50; 96 h)
<b>Methylene Chloride (75-09-2)</b>	
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

<b>610 PAH Mix 2</b>	
Persistence and degradability	May cause long-term adverse effects in the environment.
<b>acenaphthene (83-32-9)</b>	
Persistence and degradability	Not readily biodegradable in water. Adsorbs into the soil.
<b>acenaphthylene (208-96-8)</b>	
Persistence and degradability	Biodegradability in soil: no data available.
<b>anthracene (120-12-7)</b>	
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water.
ThOD	3.41 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.02
<b>benzo[a]anthracene (56-55-3)</b>	
Persistence and degradability	Not readily biodegradable in water. Photolysis in water. Ozonation in water. Forming sediments in water. Biodegradability in soil: no data available. Inhibits biodegradation processes in the soil. Adsorbs into the soil. Photodegradation in the air.
ThOD	2.95 g O <sub>2</sub> /g substance
<b>benzo[a]pyrene (50-32-8)</b>	
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Adsorbs into the soil.
Chemical oxygen demand (COD)	2.92 g O <sub>2</sub> /g substance
ThOD	2.92 g O <sub>2</sub> /g substance
<b>benzo(ghi)perylene (191-24-2)</b>	
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water. Non degradable in the soil. Adsorbs into the soil.
ThOD	2.9 g O <sub>2</sub> /g substance

# 610 PAH Mix 2

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

<b>benzo[k]fluoranthene (207-08-9)</b>	
Persistence and degradability	Not readily biodegradable in water. Ozonation in water. Forming sediments in water. Non degradable in the soil. Adsorbs into the soil.
ThOD	2.92 g O <sub>2</sub> /g substance
<b>chrysene (218-01-9)</b>	
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water. Non degradable in the soil. Adsorbs into the soil.
<b>dibenz(a,h)anthracene (53-70-3)</b>	
Persistence and degradability	Not readily biodegradable in water. Ozonation in water. Forming sediments in water. Non degradable in the soil. Adsorbs into the soil.
<b>fluoranthene (206-44-0)</b>	
Persistence and degradability	Forming sediments in water.
<b>naphthalene (91-20-3)</b>	
Persistence and degradability	Readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Adsorbs into the soil. Photolysis in the air.
Biochemical oxygen demand (BOD)	0 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	0.22 g O <sub>2</sub> /g substance
ThOD	2.99 g O <sub>2</sub> /g substance
<b>pyrene (129-00-0)</b>	
Persistence and degradability	Not readily biodegradable in water. Photolysis in water. Ozonation in water. Forming sediments in water. Non degradable in the soil. Adsorbs into the soil. Photodegradation in the air.
<b>Methylene Chloride (75-09-2)</b>	
Persistence and degradability	Not readily biodegradable in water. Biodegradable in the soil.
<b>12.3. Bioaccumulative potential</b>	
<b>610 PAH Mix 2</b>	
Bioaccumulative potential	Not established.
<b>acenaphthene (83-32-9)</b>	
BCF fish 1	257 - 1270 (BCF)
BCF fish 2	387 (BCF; 28 days)
Log Pow	3.92 (Experimental value)
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).
<b>acenaphthylene (208-96-8)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>anthracene (120-12-7)</b>	
BCF fish 1	903 - 2820 (BCF)
BCF fish 2	9200 (BCF)
BCF other aquatic organisms 1	7770 (BCF; 24 h; Chlorella sp.)
BCF other aquatic organisms 2	10500 (BCF)
Log Pow	4.5
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).
<b>benzo[a]anthracene (56-55-3)</b>	
BCF fish 1	350 (BCF; 72 h)
BCF other aquatic organisms 1	1106 (BCF; 24 h)
BCF other aquatic organisms 2	18000 (BCF; 192 h)
Log Pow	5.61 - 5.79
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).
<b>benzo[a]pyrene (50-32-8)</b>	
BCF fish 1	480 (BCF; 72 h)
BCF fish 2	70.7 (BCF; 168 h; Salmo salar)
BCF other aquatic organisms 1	3000 (BCF; 192 h)
BCF other aquatic organisms 2	1.5 (BCF; 24 h)
Log Pow	5.97 - 6.06
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).
<b>benzo(ghi)perylene (191-24-2)</b>	
Log Pow	6.51 - 7.23 (Calculated)
Bioaccumulative potential	Bioaccumable.



# 610 PAH Mix 2

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

<b>benzo[k]fluoranthene (207-08-9)</b>	
BCF fish 1	8750 (BCF)
BCF other aquatic organisms 1	0.0013 mg/kg (BCF)
BCF other aquatic organisms 2	37000 (BCF)
Log Pow	6.84
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).

<b>chrysene (218-01-9)</b>	
BCF other aquatic organisms 1	4440 (BCF)
Log Pow	5.81 - 5.86 (Experimental value)
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

<b>dibenz(a,h)anthracene (53-70-3)</b>	
Log Pow	5.97 - 6.84

<b>fluoranthene (206-44-0)</b>	
BCF fish 1	3981 (BCF)
BCF fish 2	6110 (BCF)
BCF other aquatic organisms 1	10000 (BCF; 192 h)
BCF other aquatic organisms 2	695 (BCF; 48 h)
Log Pow	5.33
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).

<b>naphthalene (91-20-3)</b>	
BCF fish 1	23 - 168 (BCF; 8 weeks; Cyprinus carpio)
Log Pow	3.3 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

<b>pyrene (129-00-0)</b>	
BCF fish 1	600 - 970 (BCF)
BCF fish 2	4810 (BCF)
BCF other aquatic organisms 1	2692 (BCF)
Log Pow	4.88 - 5.32
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

<b>Methylene Chloride (75-09-2)</b>	
BCF fish 1	2 - 40 (BCF)
Log Pow	1.25 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

### 12.4. Mobility in soil

<b>naphthalene (91-20-3)</b>	
Surface tension	0.03 N/m (100 °C)

<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

Product/Packaging 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  
UN-No. (IMDG) : 2810  
UN-No. (ADN) : 2810

# 610 PAH Mix 2

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 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.
Proper Shipping Name (IMDG)	: TOXIC LIQUID, ORGANIC, N.O.S.
Proper Shipping Name (ADN)	: TOXIC LIQUID, ORGANIC, N.O.S.
Transport document description (ADR)	: UN 2810 TOXIC LIQUID, ORGANIC, N.O.S., 6.1, III, (E), ENVIRONMENTALLY HAZARDOUS

### 14.3. Packing group

Class (ADR)	: 6.1
Classification code (ADR)	: T1
Class (IATA)	: 6.1
Class (IMDG)	: 6.1
Class (ADN)	: 6.1
Classification code (ADN)	: T1
Danger labels (ADR)	: 6.1



Division (IATA)	: 6.1
Hazard labels (IATA)	: 6.1



Danger labels (IMDG)	: 6.1
----------------------	-------



Danger labels (ADN)	: 6.1
---------------------	-------



### 14.4. Packing group

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

### 14.5. Environmental hazards

Dangerous for the environment :

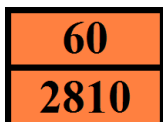


Other information : No supplementary information available.

### 14.6. Special precautions for user

#### 14.6.1. Overland transport

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



Special provisions (ADR)	: 274, 614
--------------------------	------------

# 610 PAH Mix 2

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Transport category (ADR)	: 2
Tunnel restriction code (ADR)	: E
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
EAC code	: 2X
APP code	: B

### 14.6.2. Transport by sea

Special provisions (IMDG)	: 223, 274
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP28
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-A
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Toxic if swallowed, by skin contact or by inhalation.

### 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 provisions (IATA)	: A3, A4, A137
ERG code (IATA)	: 6L

### 14.6.4. Inland waterway transport

Special provisions (ADN)	: 274, 614, 802
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP, TOX, A
Ventilation (ADN)	: VE02
Number of blue cones/lights (ADN)	: 0
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 REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration  $\geq 0.1\%$  or with a lower specific limit: Benzo[def]chrysene (EC 200-028-5, CAS 50-32-8)

Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

##### Germany

Water hazard class (WGK) : 2 - hazard to waters

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

# 610 PAH Mix 2

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 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, labelling 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.*