

## 1 Identification

· **Product identifier**

· **Product Name:** PAH Analyte Mix

· **Part Name:** ECS-B-032

· **Restrictions**

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

· **Application of the substance / the mixture** For Laboratory Use Only

· **Uses advised against** Not for Human or Animal Use

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Spex CertiPrep, LLC.  
203 Norcross Ave, Metuchen,  
NJ 08840 USA  
732-549-7144  
USMet-CRMSales@antylia.com

· **Information department:** product safety department

· **Emergency telephone number:**

Emergency Phone Number (24 hours)  
CHEMTREC (800-424-9300)  
Outside US: 703-527-3887

## 2 Hazard(s) identification

· **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids 2

H225 Highly flammable liquid and vapor.



GHS06 Skull and crossbones

Acute Toxicity - Dermal 2

H310 Fatal in contact with skin.

Acute Toxicity - Inhalation 3

H331 Toxic if inhaled.



GHS08 Health hazard

Germ Cell Mutagenicity 1B

H340 May cause genetic defects.

Carcinogenicity 1B

H350 May cause cancer.

Toxic to Reproduction 1B

H360 May damage fertility or the unborn child.

Specific Target Organ Toxicity - Repeated Exposure 1

H372 Causes damage to the central nervous system and the hematopoietic system through prolonged or repeated exposure.

Aspiration Hazard 1

H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irritation 2

H315 Causes skin irritation.

Eye Irritation 2A

H319 Causes serious eye irritation.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

Specific Target Organ Toxicity - Single Exposure 3

H336 May cause drowsiness or dizziness.

· **Label elements**

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02



GHS06



GHS07



GHS08

Product Name: PAH Analyte Mix

(Contd. of page 1)

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

benzene  
dichloromethane  
acenaphthylene  
benzo[a]pyrene

· **Hazard statements**

H225 Highly flammable liquid and vapor.  
H310 Fatal in contact with skin.  
H331 Toxic if inhaled.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H340 May cause genetic defects.  
H350 May cause cancer.  
H360 May damage fertility or the unborn child.  
H336 May cause drowsiness or dizziness.  
H372 Causes damage to the central nervous system and the hematopoietic system through prolonged or repeated exposure.  
H304 May be fatal if swallowed and enters airways.

· **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
P262 Do not get in eyes, on skin, or on clothing.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310 If swallowed: Immediately call a poison center/doctor.  
P321 Specific treatment (see on this label).  
P331 Do NOT induce vomiting.  
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P361+P364 Take off immediately all contaminated clothing and wash it before reuse.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:**

50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
120-12-7	anthracene
129-00-0	pyrene
191-24-2	Benzo(g,h,i)perylene
206-44-0	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene

· **vPvB:**

50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
85-01-8	phenanthrene, pure
129-00-0	pyrene
191-24-2	Benzo(g,h,i)perylene

(Contd. on page 3)

Printing date 11/27/2023

Reviewed on 11/27/2023

Product Name: PAH Analyte Mix

(Contd. of page 2)

206-44-0	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

71-43-2	benzene	48.4%
75-09-2	dichloromethane	48.4%
50-32-8	benzo[a]pyrene	0.2%
53-70-3	dibenz[a,h]anthracene	0.2%
56-55-3	benz[a]anthracene	0.2%
85-01-8	phenanthrene, pure	0.2%
86-73-7	fluorene	0.2%
91-20-3	naphthalene	0.2%
120-12-7	anthracene	0.2%
129-00-0	pyrene	0.2%
191-24-2	Benzo(g,h,i)perylene	0.2%
193-39-5	indeno[1,2,3-cd]pyrene	0.2%
205-99-2	benz[e]acephenanthrylene	0.2%
206-44-0	fluoranthene	0.2%
207-08-9	benzo[k]fluoranthene	0.2%
208-96-8	acenaphthylene	0.2%
218-01-9	chrysene	0.2%

· **Chemical identification of the substance/preparation**

83-32-9	acenaphthene	0.2%
---------	--------------	------

### 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.  
Remove breathing apparatus only after contaminated clothing have been completely removed.  
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**  
Supply fresh air or oxygen; call for doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Do not give anything to eat or drink - Do not induce vomiting
- **Information for Doctor:**  
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.  
· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

(Contd. on page 4)

**Product Name: PAH Analyte Mix**

(Contd. of page 3)

- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to section 13.  
Ensure adequate ventilation.

- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

· **Protective Action Criteria for Chemicals**

· <b>PAC-1:</b>		
71-43-2	benzene	52 ppm
75-09-2	dichloromethane	200 ppm
50-32-8	benzo[a]pyrene	0.6 mg/m <sup>3</sup>
53-70-3	dibenz[a,h]anthracene	0.093 mg/m <sup>3</sup>
56-55-3	benz[a]anthracene	0.6 mg/m <sup>3</sup>
83-32-9	acenaphthene	3.6 mg/m <sup>3</sup>
85-01-8	phenanthrene, pure	5.4 mg/m <sup>3</sup>
86-73-7	fluorene	6.6 mg/m <sup>3</sup>
91-20-3	naphthalene	15 ppm
120-12-7	anthracene	48 mg/m <sup>3</sup>
129-00-0	pyrene	0.15 mg/m <sup>3</sup>
191-24-2	Benzo(g,h,i)perylene	30 mg/m <sup>3</sup>
193-39-5	indeno[1,2,3-cd]pyrene	1.2 mg/m <sup>3</sup>
205-99-2	benz[e]acephenanthrylene	0.12 mg/m <sup>3</sup>
206-44-0	fluoranthene	8.2 mg/m <sup>3</sup>
208-96-8	acenaphthylene	10 mg/m <sup>3</sup>
218-01-9	chrysene	0.6 mg/m <sup>3</sup>

· <b>PAC-2:</b>		
71-43-2	benzene	800 ppm
75-09-2	dichloromethane	560 ppm
50-32-8	benzo[a]pyrene	120 mg/m <sup>3</sup>
53-70-3	dibenz[a,h]anthracene	1 mg/m <sup>3</sup>
56-55-3	benz[a]anthracene	120 mg/m <sup>3</sup>
83-32-9	acenaphthene	40 mg/m <sup>3</sup>
85-01-8	phenanthrene, pure	59 mg/m <sup>3</sup>
86-73-7	fluorene	72 mg/m <sup>3</sup>
91-20-3	naphthalene	83 ppm
120-12-7	anthracene	530 mg/m <sup>3</sup>
129-00-0	pyrene	1.7 mg/m <sup>3</sup>
191-24-2	Benzo(g,h,i)perylene	330 mg/m <sup>3</sup>
193-39-5	indeno[1,2,3-cd]pyrene	13 mg/m <sup>3</sup>
205-99-2	benz[e]acephenanthrylene	1.3 mg/m <sup>3</sup>
206-44-0	fluoranthene	90 mg/m <sup>3</sup>
208-96-8	acenaphthylene	110 mg/m <sup>3</sup>
218-01-9	chrysene	12 mg/m <sup>3</sup>

· <b>PAC-3:</b>		
71-43-2	benzene	4000* ppm
75-09-2	dichloromethane	6,900 ppm
50-32-8	benzo[a]pyrene	700 mg/m <sup>3</sup>
53-70-3	dibenz[a,h]anthracene	2.9 mg/m <sup>3</sup>
56-55-3	benz[a]anthracene	700 mg/m <sup>3</sup>
83-32-9	acenaphthene	240 mg/m <sup>3</sup>
85-01-8	phenanthrene, pure	360 mg/m <sup>3</sup>
86-73-7	fluorene	430 mg/m <sup>3</sup>
91-20-3	naphthalene	500 ppm
120-12-7	anthracene	3,200 mg/m <sup>3</sup>
129-00-0	pyrene	110 mg/m <sup>3</sup>
191-24-2	Benzo(g,h,i)perylene	2,000 mg/m <sup>3</sup>

(Contd. on page 5)

**Product Name: PAH Analyte Mix**

(Contd. of page 4)

193-39-5	indeno[1,2,3-cd]pyrene	79 mg/m <sup>3</sup>
205-99-2	benz[e]acephenanthrylene	7.9 mg/m <sup>3</sup>
206-44-0	fluoranthene	400 mg/m <sup>3</sup>
208-96-8	acenaphthylene	660 mg/m <sup>3</sup>
218-01-9	chrysene	69 mg/m <sup>3</sup>

**7 Handling and storage**

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.  
At this time, the other constituents have no known exposure limits.

<b>71-43-2 benzene</b>	
PEL	Short-term value: 15* mg/m <sup>3</sup> , 5* ppm Long-term value: 3* mg/m <sup>3</sup> , 1* ppm *table Z-2 for exclusions in 29CFR1910.1028(d)
REL	Short-term value: 1 ppm Long-term value: 0.1 ppm See Pocket Guide App. A
TLV	Short-term value: (2.5) NIC-0.1 ppm Long-term value: (0.5) NIC-0.02 ppm Skin; BEI, A1
<b>75-09-2 dichloromethane</b>	
PEL	Short-term value: 125 ppm Long-term value: 25 ppm see 29 CFR 1910.1052
REL	See Pocket Guide App. A
TLV	Long-term value: 50 ppm BEI, A3
<b>50-32-8 benzo[a]pyrene</b>	
PEL	Long-term value: 0.2 mg/m <sup>3</sup> see Coal tar pitch volatiles
REL	Long-term value: 0.1 mg/m <sup>3</sup> Coal tar pitch volatile; Pocket Guide Apps. A+C
TLV	L; BEI <sub>p</sub> , A2
<b>56-55-3 benz[a]anthracene</b>	
TLV	L; BEI-P, A2
<b>91-20-3 naphthalene</b>	
PEL	Long-term value: 50 mg/m <sup>3</sup> , 10 ppm
REL	Short-term value: 75 mg/m <sup>3</sup> , 15 ppm Long-term value: 50 mg/m <sup>3</sup> , 10 ppm

(Contd. on page 6)

**Product Name: PAH Analyte Mix**

(Contd. of page 5)

TLV	Long-term value: 10 ppm Skin; BEI, A3
<b>205-99-2 benz[e]acephenanthrylene</b>	
TLV	L; BEIp, A2
<b>218-01-9 chrysene</b>	
PEL	Long-term value: 0.2 mg/m <sup>3</sup> see Coal Tar Pitch Volatiles
REL	Long-term value: 0.1 * mg/m <sup>3</sup> *Cyclohexane-extrble.fraction;PocketGuide Apps.A+C
TLV	L, BEIp, A3
<b>Ingredients with biological limit values:</b>	
<b>71-43-2 benzene</b>	
BEI	25 µg/g creatinine Medium: urine Time: end of shift Parameter: S-Phenylmercapturic acid (background)
	500 µg/g creatinine Medium: urine Time: end of shift Parameter: t,t-Muconic acid (background)
<b>75-09-2 dichloromethane</b>	
BEI	0.3 mg/L Medium: urine Time: end of shift Parameter: Dichloromethane (semi-quantitative)
<b>50-32-8 benzo[a]pyrene</b>	
BEI	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
<b>56-55-3 benz[a]anthracene</b>	
BEI	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
<b>91-20-3 naphthalene</b>	
BEI	- Medium: - Time: end of shift Parameter: 1-Naphthol with hydrolysis + 2-Naphthol with hydrolysis (Nq,Ns)
<b>205-99-2 benz[e]acephenanthrylene</b>	
BEI	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
<b>218-01-9 chrysene</b>	
BEI	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

(Contd. on page 7)

Product Name: PAH Analyte Mix

(Contd. of page 6)

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
Color:	According to product specification
Odor:	Characteristic
Odour Threshold:	Not applicable.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	40 °C (104 °F)

· Flash point: < 0 °C (< 32 °F)

· Flammability (solid, gaseous): Highly flammable.

· Auto igniting: 555 °C (1,031 °F)

· Decomposition temperature: Not applicable.

· Ignition temperature: Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Explosion limits:

Lower:	1.2 Vol %
Upper:	22 Vol %

· Vapor pressure at 20 °C (68 °F): 453 hPa (339.8 mm Hg)

· Vapor pressure at 50 °C (122 °F): 350 hPa (262.5 mm Hg)

· Density: Not applicable.

· Relative density: Not applicable.

· Vapor density: Not applicable.

· Evaporation rate: Not applicable.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not applicable.

· Viscosity:

Dynamic:	Not applicable.
Kinematic:	Not applicable.

· Solvent content:

Organic solvents:	96.8 %
VOC content:	48.40 %

Solids content: 2.6 %

(Contd. on page 8)

Product Name: PAH Analyte Mix

(Contd. of page 7)

· **Other information** No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

**71-43-2 benzene**

Oral	LD50	4,894 mg/kg (rat)
Dermal	LD50	48 mg/kg (mouse)
Inhalative	LC50/4 h	9,980 mg/l (mouse)

**75-09-2 dichloromethane**

Oral	LD50	1,600 mg/kg (rat)
Inhalative	LC50/4 h	88 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Toxic

Irritant

Product is suspected to cause damage to fertility.

Product is suspected to cause birth defects.

The product can cause inheritable damage.

· **Carcinogenic categories**

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

71-43-2	benzene	1
75-09-2	dichloromethane	2A
50-32-8	benzo[a]pyrene	1
53-70-3	dibenz[a,h]anthracene	2A
56-55-3	benz[a]anthracene	2B
83-32-9	acenaphthene	3
85-01-8	phenanthrene, pure	3
86-73-7	fluorene	3
91-20-3	naphthalene	2B
120-12-7	anthracene	3
129-00-0	pyrene	3
191-24-2	Benzo(g,h,i)perylene	3
193-39-5	indeno[1,2,3-cd]pyrene	2B
205-99-2	benz[e]acephenanthrylene	2B
206-44-0	fluoranthene	3
207-08-9	benzo[k]fluoranthene	2B
218-01-9	chrysene	2B

· **NTP (National Toxicology Program)**

71-43-2	benzene	K
75-09-2	dichloromethane	R
50-32-8	benzo[a]pyrene	R
53-70-3	dibenz[a,h]anthracene	R

(Contd. on page 9)



Product Name: PAH Analyte Mix

(Contd. of page 8)

56-55-3	benz[a]anthracene	R
85-01-8	phenanthrene, pure	R
86-73-7	fluorene	R
91-20-3	naphthalene	R
120-12-7	anthracene	R
129-00-0	pyrene	R
193-39-5	indeno[1,2,3-cd]pyrene	R
205-99-2	benz[e]acephenanthrylene	R
206-44-0	fluoranthene	R
207-08-9	benzo[k]fluoranthene	R
218-01-9	chrysene	R

· OSHA-Ca (Occupational Safety & Health Administration)

71-43-2	benzene
75-09-2	dichloromethane

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 3 (Self-assessment): extremely hazardous for water  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
Danger to drinking water if even extremely small quantities leak into the ground.
- **Results of PBT and vPvB assessment**

· **PBT:**

50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
120-12-7	anthracene
129-00-0	pyrene
191-24-2	Benzo(g,h,i)perylene
206-44-0	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene

· **vPvB:**

50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
85-01-8	phenanthrene, pure
129-00-0	pyrene
191-24-2	Benzo(g,h,i)perylene
206-44-0	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene

- **Other adverse effects** No further relevant information available.

13 Disposal considerations





- **Waste treatment methods**
- **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

(Contd. on page 10)

Product Name: PAH Analyte Mix

(Contd. of page 9)

**14 Transport information**

<ul style="list-style-type: none"> <li>· UN-Number</li> <li>· DOT, ADR, IMDG, IATA</li> </ul>	<p>UN1992</p>
<ul style="list-style-type: none"> <li>· UN proper shipping name</li> <li>· DOT</li> <li>· ADR</li> <li>· IMDG</li> <li>· IATA</li> </ul>	<p>Flammable liquids, toxic, n.o.s. (Benzene) 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE), ENVIRONMENTALLY HAZARDOUS FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE, NAPHTHALENE, CRUDE), MARINE POLLUTANT FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE)</p>
<ul style="list-style-type: none"> <li>· Transport hazard class(es)</li> <li>· DOT</li> </ul>	
	
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p>3 Flammable liquids 3, 6.1</p>
<ul style="list-style-type: none"> <li>· ADR</li> </ul>	
	
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p>3 Flammable liquids 3+6.1</p>
<ul style="list-style-type: none"> <li>· IMDG</li> </ul>	
	
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p>3 Flammable liquids 3/6.1</p>
<ul style="list-style-type: none"> <li>· IATA</li> </ul>	
	
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p>3 Flammable liquids 3 (6.1)</p>
<ul style="list-style-type: none"> <li>· Packing group</li> <li>· DOT, ADR, IMDG, IATA</li> </ul>	<p>II</p>
<ul style="list-style-type: none"> <li>· Environmental hazards:</li> <li>· Marine pollutant:</li> <li>· Special marking (ADR):</li> </ul>	<p>Product contains environmentally hazardous substances: benzo[a]pyrene Symbol (fish and tree) Symbol (fish and tree)</p>
<ul style="list-style-type: none"> <li>· Special precautions for user</li> <li>· Hazard identification number (Kemler code):</li> <li>· EMS Number:</li> <li>· Stowage Category</li> <li>· Stowage Code</li> </ul>	<p>Warning: Flammable liquids 336 F-E,S-D B SW2 Clear of living quarters.</p>
<ul style="list-style-type: none"> <li>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</li> </ul>	<p>Not applicable.</p>
<ul style="list-style-type: none"> <li>· Transport/Additional information:</li> </ul>	
<ul style="list-style-type: none"> <li>· ADR</li> <li>· Excepted quantities (EQ)</li> </ul>	<p>Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>

(Contd. on page 11)

Printing date 11/27/2023

Reviewed on 11/27/2023

Product Name: PAH Analyte Mix

(Contd. of page 10)

<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<p>1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	<p>UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE), 3 (6.1), II, ENVIRONMENTALLY HAZARDOUS</p>

**15 Regulatory information**

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

<ul style="list-style-type: none"> <li>· <b>Section 313 (Specific toxic chemical listings):</b></li> </ul>	
71-43-2	benzene
75-09-2	dichloromethane
50-32-8	benzo[a]pyrene
53-70-3	dibenz[a,h]anthracene
56-55-3	benz[a]anthracene
85-01-8	phenanthrene, pure
91-20-3	naphthalene
120-12-7	anthracene
191-24-2	Benzo(g,h,i)perylene
193-39-5	indeno[1,2,3-cd]pyrene
205-99-2	benz[e]acephenanthrylene
206-44-0	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene

- **TSCA (Toxic Substances Control Act):**

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

71-43-2	benzene	ACTIVE
75-09-2	dichloromethane	ACTIVE
50-32-8	benzo[a]pyrene	ACTIVE
53-70-3	dibenz[a,h]anthracene	ACTIVE
56-55-3	benz[a]anthracene	ACTIVE
83-32-9	acenaphthene	ACTIVE
85-01-8	phenanthrene, pure	ACTIVE
86-73-7	fluorene	ACTIVE
91-20-3	naphthalene	ACTIVE
120-12-7	anthracene	ACTIVE
129-00-0	pyrene	ACTIVE
193-39-5	indeno[1,2,3-cd]pyrene	ACTIVE
206-44-0	fluoranthene	ACTIVE
208-96-8	acenaphthylene	ACTIVE
218-01-9	chrysene	ACTIVE

- **Hazardous Air Pollutants**

71-43-2	benzene
75-09-2	dichloromethane
50-32-8	benzo[a]pyrene
53-70-3	dibenz[a,h]anthracene
56-55-3	benz[a]anthracene
85-01-8	phenanthrene, pure
86-73-7	fluorene
91-20-3	naphthalene
120-12-7	anthracene
129-00-0	pyrene
193-39-5	indeno[1,2,3-cd]pyrene

(Contd. on page 12)

**Product Name: PAH Analyte Mix**

(Contd. of page 11)

205-99-2	benz[e]acephenanthrylene
206-44-0	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene

**· Proposition 65**

**· Chemicals known to cause cancer:**

71-43-2	benzene
75-09-2	dichloromethane
50-32-8	benzo[a]pyrene
53-70-3	dibenz[a,h]anthracene
56-55-3	benz[a]anthracene
91-20-3	naphthalene
193-39-5	indeno[1,2,3-cd]pyrene
205-99-2	benz[e]acephenanthrylene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene

**· Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**· Chemicals known to cause reproductive toxicity for males:**

71-43-2	benzene
---------	---------

**· Chemicals known to cause developmental toxicity:**

71-43-2	benzene
---------	---------

**· Carcinogenic categories**

**· EPA (Environmental Protection Agency)**

71-43-2	benzene	A, K/L
75-09-2	dichloromethane	L
50-32-8	benzo[a]pyrene	CaH
53-70-3	dibenz[a,h]anthracene	B2
56-55-3	benz[a]anthracene	B2
85-01-8	phenanthrene, pure	D
86-73-7	fluorene	D
91-20-3	naphthalene	C, CBD
120-12-7	anthracene	D
129-00-0	pyrene	D
191-24-2	Benzo(g,h,i)perylene	D
193-39-5	indeno[1,2,3-cd]pyrene	B2
205-99-2	benz[e]acephenanthrylene	B2
206-44-0	fluoranthene	D
207-08-9	benzo[k]fluoranthene	B2
208-96-8	acenaphthylene	D
218-01-9	chrysene	B2

**· TLV (Threshold Limit Value)**

71-43-2	benzene	A1
75-09-2	dichloromethane	A3
50-32-8	benzo[a]pyrene	A2
56-55-3	benz[a]anthracene	A2
91-20-3	naphthalene	A4
205-99-2	benz[e]acephenanthrylene	A2
218-01-9	chrysene	A3

**· NIOSH-Ca (National Institute for Occupational Safety and Health)**

71-43-2	benzene
75-09-2	dichloromethane
50-32-8	benzo[a]pyrene
218-01-9	chrysene

**· GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 13)

Product Name: PAH Analyte Mix

(Contd. of page 12)

**Hazard pictograms**



**Signal word** Danger

**Hazard-determining components of labeling:**

benzene  
dichloromethane  
acenaphthylene  
benzo[a]pyrene

**Hazard statements**

H225 Highly flammable liquid and vapor.  
H310 Fatal in contact with skin.  
H331 Toxic if inhaled.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H340 May cause genetic defects.  
H350 May cause cancer.  
H360 May damage fertility or the unborn child.  
H336 May cause drowsiness or dizziness.  
H372 Causes damage to the central nervous system and the hematopoietic system through prolonged or repeated exposure.  
H304 May be fatal if swallowed and enters airways.

**Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
P262 Do not get in eyes, on skin, or on clothing.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310 If swallowed: Immediately call a poison center/doctor.  
P321 Specific treatment (see on this label).  
P331 Do NOT induce vomiting.  
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P361+P364 Take off immediately all contaminated clothing and wash it before reuse.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**National regulations:**

**Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Department issuing SDS:** product safety department

**Contact:**

Spex CertiPrep, LLC.  
1-732-549-7144

**Date of preparation / last revision** 11/27/2023

**Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
VOC: Volatile Organic Compounds (USA, EU)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

(Contd. on page 14)

---

**Product Name: PAH Analyte Mix**

---

(Contd. of page 13)

NIOSH: National Institute for Occupational Safety  
OSHA: Occupational Safety & Health  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit  
BEL: Biological Exposure Limit  
Flammable Liquids 2: Flammable liquids – Category 2  
Acute Toxicity - Dermal 2: Acute toxicity – Category 2  
Acute Toxicity - Inhalation 3: Acute toxicity – Category 3  
Skin Irritation 2: Skin corrosion/irritation – Category 2  
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A  
Sensitization - Skin 1: Skin sensitisation – Category 1  
Germ Cell Mutagenicity 1B: Germ cell mutagenicity – Category 1B  
Carcinogenicity 1B: Carcinogenicity – Category 1B  
Toxic to Reproduction 1B: Reproductive toxicity – Category 1B  
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3  
Specific Target Organ Toxicity - Repeated Exposure 1: Specific target organ toxicity (repeated exposure) – Category 1  
Aspiration Hazard 1: Aspiration hazard – Category 1

---