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1 Identification

· **Product identifier**

· **Trade name: LC Standard-PAH Analyte Mix**
· **Article number** N9334000
· **Application of the substance / the mixture** Laboratory chemicals

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**

PerkinElmer, Inc.
710 Bridgeport Avenue
Shelton, Connecticut 06484 USA
CustomerCareUS@perkinelmer.com
203-925-4600
· **Emergency telephone number:**
CHEMTREC (within US) 800-424-9300
CHEMTREC (from outside US) +1 703-527-3887 (call collect)
CHEMTREC (within AU) +(61)-290372994

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2 Hazard(s) identification

· **Classification of the substance or mixture**

Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.

Health hazard

Carc. 2 H351 Suspected of causing cancer.

Acute Tox. 4 H312 Harmful in contact with skin.
Eye Irrit. 2A H319 Causes serious eye irritation.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms** GHS02, GHS06, GHS07, GHS08
· **Signal word** Danger

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

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· **Hazard statements**
H225 Highly flammable liquid and vapor.
H312 Harmful in contact with skin.
H331 Toxic if inhaled.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.

· **Precautionary statements**

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
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.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
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/ 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.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P321	Specific treatment (see on this label).
P312	Call a poison center/doctor if you feel unwell.
P362+P364	Take off contaminated clothing and wash it before reuse.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use for extinction: CO2, powder or water spray.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 2
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 2
Fire = 3
Reactivity = 0

· **Other hazards**
The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

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· ***Results of PBT and vPvB assessment***
· ***PBT:*** *Not applicable.*
· ***vPvB:*** *Not applicable.*

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3 Composition/information on ingredients

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

· **Hazardous components:**		
75-05-8	*acetonitrile* *Flam. Liq. 2, H225* *Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2A, H319*	*99.4661%*
91-20-3	*naphthalene* *Carc. 2, H351* *Aquatic Acute 1, H400; Aquatic Chronic 1, H410* *Acute Tox. 4, H302* *Flam. Liq. 4, H227*	*0.1%*
208-96-8	*acenaphthylene* *Acute Tox. 1, H310; Acute Tox. 1, H330*	*0.1%*
53-70-3	*dibenz[a,h]anthracene* *Carc. 1B, H350* *Aquatic Acute 1, H400; Aquatic Chronic 1, H410*	*0.001%*

· **Additional Components**		
83-32-9	*acenaphthene*	*0.1%*
90-12-0	*1-methylnaphthalene* *Acute Tox. 4, H302* *Flam. Liq. 4, H227*	*0.1%*
91-57-6	*2-methylnaphthalene* *Acute Tox. 4, H302*	*0.1%*
86-73-7	*fluorene* *Carc. 1B, H350*	*0.01%*
85-01-8	*phenanthrene, pure* *Carc. 1B, H350* *Acute Tox. 4, H302; Skin Irrit. 2, H315*	*0.005%*
120-12-7	*anthracene* *Carc. 1B, H350* *PBT*	*0.005%*
129-00-0	*pyrene* *Acute Tox. 3, H311; Acute Tox. 3, H331* *Carc. 1B, H350*	*0.005%*
218-01-9	*chrysene* *Muta. 2, H341; Carc. 1B, H350* *Aquatic Acute 1, H400; Aquatic Chronic 1, H410*	*0.005%*

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193-39-5	indeno[1,2,3-cd]pyrene Carc. 2, H351	0.001%
50-32-8	benzo[a]pyrene Muta. 1B, H340; Carc. 1B, H350; Repr. 1B, H360 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Sens. 1, H317	0.0005%
191-24-2	Benzo(g,h,i)perylene	0.0005%
206-44-0	fluoranthene Carc. 1B, H350 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Acute Tox. 4, H332	0.0005%
56-55-3	benz[a]anthracene Carc. 1B, H350 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.0001%
205-82-3	benzo[j]fluoranthene Carc. 1B, H350 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.0001%
205-99-2	benz[e]acephenanthrylene Carc. 1B, H350 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.0001%
207-08-9	benzo[k]fluoranthene Carc. 1B, H350 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.0001%

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:** If symptoms persist consult 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.

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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** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** Mouth respiratory protective device.

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6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Prevent seepage into sewage system, workpits and cellars.
· **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 item 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**

· **PAC-1:**		
75-05-8	acetonitrile	13 ppm
83-32-9	acenaphthene	3.6 mg/m³
90-12-0	1-methylnaphthalene	20 mg/m³
91-20-3	naphthalene	15 ppm
91-57-6	2-methylnaphthalene	9 mg/m³
208-96-8	acenaphthylene	10 mg/m³
86-73-7	fluorene	6.6 mg/m³
85-01-8	phenanthrene, pure	5.4 mg/m³
120-12-7	anthracene	48 mg/m³
129-00-0	pyrene	0.15 mg/m³
218-01-9	chrysene	0.6 mg/m³
53-70-3	dibenz[a,h]anthracene	0.093 mg/m³
193-39-5	indeno[1,2,3-cd]pyrene	1.2 mg/m³
50-32-8	benzo[a]pyrene	0.6 mg/m³
191-24-2	Benzo(g,h,i)perylene	30 mg/m³
206-44-0	fluoranthene	8.2 mg/m³
56-55-3	benz[a]anthracene	0.6 mg/m³

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205-99-2	benz[e]acephenanthrylene	0.12 mg/m³

· **PAC-2:**

75-05-8	acetonitrile	50 ppm
83-32-9	acenaphthene	40 mg/m³
90-12-0	1-methylnaphthalene	61 mg/m³
91-20-3	naphthalene	83 ppm
91-57-6	2-methylnaphthalene	54 mg/m³
208-96-8	acenaphthylene	110 mg/m³
86-73-7	fluorene	72 mg/m³
85-01-8	phenanthrene, pure	59 mg/m³
120-12-7	anthracene	530 mg/m³
129-00-0	pyrene	1.7 mg/m³
218-01-9	chrysene	12 mg/m³
53-70-3	dibenz[a,h]anthracene	1 mg/m³
193-39-5	indeno[1,2,3-cd]pyrene	13 mg/m³
50-32-8	benzo[a]pyrene	120 mg/m³
191-24-2	Benzo(g,h,i)perylene	330 mg/m³
206-44-0	fluoranthene	90 mg/m³
56-55-3	benz[a]anthracene	120 mg/m³
205-99-2	benz[e]acephenanthrylene	1.3 mg/m³

· **PAC-3:**

75-05-8	acetonitrile	150 ppm
83-32-9	acenaphthene	240 mg/m³
90-12-0	1-methylnaphthalene	360 mg/m³
91-20-3	naphthalene	500 ppm
91-57-6	2-methylnaphthalene	320 mg/m³
208-96-8	acenaphthylene	660 mg/m³
86-73-7	fluorene	430 mg/m³
85-01-8	phenanthrene, pure	360 mg/m³
120-12-7	anthracene	3,200 mg/m³
129-00-0	pyrene	110 mg/m³
218-01-9	chrysene	69 mg/m³
53-70-3	dibenz[a,h]anthracene	2.9 mg/m³
193-39-5	indeno[1,2,3-cd]pyrene	79 mg/m³
50-32-8	benzo[a]pyrene	700 mg/m³
191-24-2	Benzo(g,h,i)perylene	2,000 mg/m³
206-44-0	fluoranthene	400 mg/m³
56-55-3	benz[a]anthracene	700 mg/m³

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205-99-2	benz[e]acephenanthrylene	7.9 mg/m³

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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.

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8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 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.

75-05-8 acetonitrile	
PEL	Long-term value: 70 mg/m³, 40 ppm
REL	Long-term value: 34 mg/m³, 20 ppm
TLV	Long-term value: 34 mg/m³, 20 ppm Skin

91-20-3 naphthalene	
PEL	Long-term value: 50 mg/m³, 10 ppm
REL	Short-term value: 75 mg/m³, 15 ppm Long-term value: 50 mg/m³, 10 ppm
TLV	Long-term value: 52 mg/m³, 10 ppm Skin; BEI

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

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· **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.
· **Breathing equipment:**
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.
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**

Tightly sealed goggles or safety glasses

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Liquid
Color:	Transparent
· **Odor:**	Characteristic
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	-46 °C (-50.8 °F)
Boiling point/Boiling range:	81 °C (177.8 °F)

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· **Flash point:**	5 °C (41 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	525 °C (977 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	4.4 Vol %
Upper:	16 Vol %
· **Vapor pressure at 20 °C (68 °F):**	97 hPa (72.8 mm Hg)
· **Density:**	Not determined.
· **Relative density**	Not determined.
· **Vapor density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
Water:	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
VOC content:	0.00 %
Solids content:	0.4 %
· **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.

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11 Toxicological information

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

· **LD/LC50 values that are relevant for classification:**		
75-05-8 acetonitrile		
Oral	LD50	2730 mg/kg (rat)
Dermal	LD50	1250 mg/kg (rabbit)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** Irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic
Harmful
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
83-32-9	acenaphthene	3
91-20-3	naphthalene	2B
86-73-7	fluorene	3
85-01-8	phenanthrene, pure	3
120-12-7	anthracene	3
129-00-0	pyrene	3
218-01-9	chrysene	2B
53-70-3	dibenz[a,h]anthracene	2A
193-39-5	indeno[1,2,3-cd]pyrene	2B
50-32-8	benzo[a]pyrene	1
191-24-2	Benzo(g,h,i)perylene	3
206-44-0	fluoranthene	3
56-55-3	benz[a]anthracene	2B
205-82-3	benzo[j]fluoranthene	2B
205-99-2	benz[e]acephenanthrylene	2B
207-08-9	benzo[k]fluoranthene	2B

· **NTP (National Toxicology Program)**		
91-20-3	naphthalene	R
86-73-7	fluorene	R
85-01-8	phenanthrene, pure	R
120-12-7	anthracene	R
129-00-0	pyrene	R

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218-01-9	chrysene	R
53-70-3	dibenz[a,h]anthracene	R
193-39-5	indeno[1,2,3-cd]pyrene	R
50-32-8	benzo[a]pyrene	R
206-44-0	fluoranthene	R
56-55-3	benz[a]anthracene	R
205-82-3	benzo[j]fluoranthene	R
205-99-2	benz[e]acephenanthrylene	R
207-08-9	benzo[k]fluoranthene	R

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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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:**
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Dispose of container and materials in accordance with local, regional and national regulations.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

· **UN-Number**
· **DOT, ADR, IMDG, IATA** UN1992

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· **UN proper shipping name**
· **DOT** *Flammable liquids, toxic, n.o.s. (Acetonitrile, pyrene)*
· **ADR** *1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (ACETONITRILE, pyrene)*
· **IMDG, IATA** *FLAMMABLE LIQUID, TOXIC, N.O.S. (ACETONITRILE, pyrene)*

· **Transport hazard class(es)**

· **DOT**

· **Class** *3 Flammable liquids*
· **Label** *3, 6.1*

· **ADR**

· **Class** *3 (FT1) Flammable liquids*
· **Label** *3+6.1*

· **IMDG**

· **Class** *3 Flammable liquids*
· **Label** *3/6.1*

· **IATA**

· **Class** *3 Flammable liquids*
· **Label** *3 (6.1)*

· **Packing group**
· **DOT, ADR, IMDG, IATA** *II*

· **Environmental hazards:**
· **Marine pollutant:** *No*

· **Special precautions for user** *Warning: Flammable liquids*
· **Hazard identification number (Kemler code):** *336*
· **EMS Number:** *F-E,S-D*
· **Stowage Category** *B*

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· **Stowage Code**	*SW2 Clear of living quarters.*
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	*Not applicable.*
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	*On passenger aircraft/rail: 1 L* *On cargo aircraft only: 60 L*
· **ADR**	
· **Excepted quantities (EQ)**	*Code: E2* *Maximum net quantity per inner packaging: 30 ml* *Maximum net quantity per outer packaging: 500 ml*
· **IMDG**	
· **Limited quantities (LQ)**	*1L*
· **Excepted quantities (EQ)**	*Code: E2* *Maximum net quantity per inner packaging: 30 ml* *Maximum net quantity per outer packaging: 500 ml*
· **UN "Model Regulation":**	*UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (ACETONITRILE, PYRENE), 3 (6.1), II*

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15 Regulatory information

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

75-05-8	*acetonitrile* *Flam. Liq. 2, H225* *Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2A, H319*	*99.4661%*
83-32-9	*acenaphthene*	*0.1%*
90-12-0	*1-methylnaphthalene* *Acute Tox. 4, H302* *Flam. Liq. 4, H227*	*0.1%*

· **Sara**

· **Section 355 (extremely hazardous substances):**

129-00-0	*pyrene*

· **Section 313 (Specific toxic chemical listings):**

75-05-8	*acetonitrile*
91-20-3	*naphthalene*
85-01-8	*phenanthrene, pure*
120-12-7	*anthracene*
218-01-9	*chrysene*
53-70-3	*dibenz[a,h]anthracene*
193-39-5	*indeno[1,2,3-cd]pyrene*
50-32-8	*benzo[a]pyrene*

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191-24-2	Benzo(g,h,i)perylene
206-44-0	fluoranthene
56-55-3	benz[a]anthracene
205-82-3	benzo[j]fluoranthene
205-99-2	benz[e]acephenanthrylene
207-08-9	benzo[k]fluoranthene

· **TSCA (Toxic Substances Control Act):**
All ingredients are listed.

75-05-8	acetonitrile	ACTIVE
83-32-9	acenaphthene	ACTIVE
90-12-0	1-methylnaphthalene	ACTIVE
91-20-3	naphthalene	ACTIVE
91-57-6	2-methylnaphthalene	ACTIVE
208-96-8	acenaphthylene	ACTIVE
86-73-7	fluorene	ACTIVE
85-01-8	phenanthrene, pure	ACTIVE
120-12-7	anthracene	ACTIVE
129-00-0	pyrene	ACTIVE
218-01-9	chrysene	ACTIVE
53-70-3	dibenz[a,h]anthracene	ACTIVE
193-39-5	indeno[1,2,3-cd]pyrene	ACTIVE
50-32-8	benzo[a]pyrene	ACTIVE
206-44-0	fluoranthene	ACTIVE
56-55-3	benz[a]anthracene	ACTIVE

· **Hazardous Air Pollutants**	
75-05-8	acetonitrile
91-20-3	naphthalene
86-73-7	fluorene
85-01-8	phenanthrene, pure
120-12-7	anthracene
129-00-0	pyrene
218-01-9	chrysene
53-70-3	dibenz[a,h]anthracene
193-39-5	indeno[1,2,3-cd]pyrene
50-32-8	benzo[a]pyrene
206-44-0	fluoranthene
56-55-3	benz[a]anthracene
205-99-2	benz[e]acephenanthrylene
207-08-9	benzo[k]fluoranthene

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· **Proposition 65**

· **Chemicals known to cause cancer:**	
91-20-3	naphthalene
218-01-9	chrysene
53-70-3	dibenz[a,h]anthracene
193-39-5	indeno[1,2,3-cd]pyrene
50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
205-82-3	benzo[j]fluoranthene
205-99-2	benz[e]acephenanthrylene
207-08-9	benzo[k]fluoranthene

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**		
75-05-8	acetonitrile	CBD, D
91-20-3	naphthalene	C, CBD
91-57-6	2-methylnaphthalene	I
208-96-8	acenaphthylene	D
86-73-7	fluorene	D
85-01-8	phenanthrene, pure	D
120-12-7	anthracene	D
129-00-0	pyrene	D
218-01-9	chrysene	B2
53-70-3	dibenz[a,h]anthracene	B2
193-39-5	indeno[1,2,3-cd]pyrene	B2
50-32-8	benzo[a]pyrene	CaH
191-24-2	Benzo(g,h,i)perylene	D
206-44-0	fluoranthene	D
56-55-3	benz[a]anthracene	B2
205-99-2	benz[e]acephenanthrylene	B2
207-08-9	benzo[k]fluoranthene	B2

· **TLV (Threshold Limit Value established by ACGIH)**		
75-05-8	acetonitrile	A4
90-12-0	1-methylnaphthalene	A4

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91-20-3	naphthalene	A4
91-57-6	2-methylnaphthalene	A4
218-01-9	chrysene	A3
50-32-8	benzo[a]pyrene	A2
56-55-3	benz[a]anthracene	A2
205-99-2	benz[e]acephenanthrylene	A2

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**	
218-01-9	chrysene
50-32-8	benzo[a]pyrene

· **National regulations:**

· **Information about limitation of use:**
Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

*
16 Other information

Disclaimer
The information provided in this Material Safety Data Sheet is based on our present knowledge, and believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be considered a warranty or quality specification. All materials may present unknown hazards, and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards which exist. PerkinElmer shall not be held liable for any damage resulting from handling or from contact with the product.

· **Department issuing SDS:** Environmental, Health and Safety
· **Contact:**
Within the USA: 1-(800)-762-4000
Outside the USA: 1-(203)-712-8488
· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport 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
ACGIH: American Conference of Governmental Industrial Hygienists
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

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vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 4: Flammable liquids – Category 4
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 1: Acute toxicity – Category 1
Acute Tox. 3: Acute toxicity – Category 3
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Carc. 1B: Carcinogenicity – Category 1B
Carc. 2: Carcinogenicity – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

· **** Data compared to the previous version altered.***