

1 Identification of substance

- **Product details**
- **Trade name:** Mix B Polynuclear Aromatic Hydrocarbon Method 8100
- **Article number:** N9331045
- **Application of the substance / the preparation** Laboratory chemicals
- **Manufacturer/Supplier:**
PerkinElmer Life and Analytical Sciences
710 Bridgeport Avenue
Shelton, Connecticut 06484 USA
- **Information department:**
Technical Support
800-762-4000
- **Emergency information:**
CHEMTREC (within U.S.) 800 424-9300
CHEMTREC (from outside U.S.) 1(703)-527-3883

2 Composition/Data on components

- **Chemical characterization:**
- **CAS No. Description**
75-09-2 dichloromethane
- **Identification number(s)**
- **EINECS Number:** 200-838-9
- **Index number:** 602-004-00-3
- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

Hazardous components:

67-56-1	methyl alcohol	25-50%
75-09-2	dichloromethane	25-50%
56-49-5	3-methylcholanthrene	< 1%
205-82-3	benzo[j]fluoranthene	< 1%

Additional Components

194-59-2	7H-Dibenzo(c,g)carbazole	< 1%
226-36-8	Dibenz(a,h)acridine	< 1%
224-42-0	Dibenz(a,j)acridine	< 1%
192-65-4	DIBENZO(A,E)PYRENE	< 1%
189-64-0	Dibenzo(a,h)pyrene	< 1%
189-55-9	Dibenzo(a,i)pyrene	< 1%

3 Hazards identification

Hazard description:



Toxic
Highly flammable

- **Information pertaining to particular dangers for man and environment:**
The product has to be labelled due to the calculation procedure of international guidelines.
May cause cancer.

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Highly flammable.

Also toxic by inhalation, in contact with skin and if swallowed.

Also toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

Limited evidence of a carcinogenic effect.

· **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 3

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = *3

Fire = 3

Reactivity = 0

4 First aid measures

· **General information:**

Immediately remove any clothing soiled by the product.

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. Then consult a doctor.

· **After swallowing:** Do not induce vomiting; immediately call for medical help.

5 Fire fighting measures

· **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

· **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

· **Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· **Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

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Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information 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.
- **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.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

67-56-1 methyl alcohol

PEL ()	260 mg/m ³ , 200 ppm
REL ()	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
TLV ()	Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 ppm Skin; BEI

75-09-2 dichloromethane

PEL ()	Short-term value: 125 ppm Long-term value: 25 ppm see 29 CFR 1910.1052
REL ()	LFC
TLV ()	174 mg/m ³ , 50 ppm BEI

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

- **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 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.

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· 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

· General Information

Form:	Liquid
Color:	Colorless
Odor:	Characteristic

· Change in condition

Melting point/Melting range:	-95.1°C (-139°F)
Boiling point/Boiling range:	40°C (104°F)

· **Flash point:** ≤ 21°C (≤ 70°F)

· **Ignition temperature:** 455°C (851°F)

· **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:	5.5 Vol %
Upper:	44.0 Vol %

· **Vapor pressure at 20°C (68°F):** 453 hPa (340 mm Hg)

· **Density at 20°C (68°F):** 1.33 g/cm³

· Solubility in / Miscibility with

Water at 20°C (68°F): 20 g/l

· Solvent content:

Organic solvents: 99.2 %

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VOC content: 99,2 %

Solids content: 0.1 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

· **Acute toxicity:**

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

67-56-1 methyl alcohol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

75-09-2 dichloromethane

Oral	LD50	1600 mg/kg (rat)
Inhalative	LC50/4 h	88 mg/l (rat)

· **Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** No 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
Carcinogenic.

12 Ecological information

· **General notes:**

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.

13 Disposal considerations

· **Product:**

· **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.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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14 Transport information

· DOT regulations:



- **Hazard class:** 3
- **Identification number:** UN1992
- **Packing group:** II
- **Proper shipping name (technical name):** FLAMMABLE LIQUID, TOXIC, N.O.S. (METHANOL)
- **Label:** 3+6.1

· Land transport ADR/RID (cross-border):



- **ADR/RID class:** 3 Flammable liquids
- **Danger code (Kemler):** 336
- **UN-Number:** 1992
- **Packaging group:** II
- **Label:** 3+6.1
- **Description of goods:** 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (METHANOL)

· Maritime transport IMDG:



- **IMDG Class:** 3
- **UN Number:** 1992
- **Label:** 3+6.1
- **Packaging group:** II
- **EMS Number:** F-E,S-D
- **Marine pollutant:** No
- **Propper shipping name:** FLAMMABLE LIQUID, TOXIC, N.O.S. (METHANOL)

· Air transport ICAO-TI and IATA-DGR:



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1992
- **Label:** 3+6.1
- **Packaging group:** II
- **Proper shipping name:** FLAMMABLE LIQUID, TOXIC, N.O.S. (METHANOL)

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15 Regulations

· **Sara**

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

None of the ingredients is listed.

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

67-56-1	methyl alcohol
75-09-2	dichloromethane
56-49-5	3-methylcholanthrene
194-59-2	7H-Dibenzo(c,g)carbazole
205-82-3	benzo[j]fluoranthene
226-36-8	Dibenz(a,h)acridine
224-42-0	Dibenz(a,j)acridine
189-64-0	Dibenzo(a,h)pyrene
189-55-9	Dibenzo(a,i)pyrene

· **Proposition 65**

· **Chemicals known to cause cancer:**

75-09-2	dichloromethane
56-49-5	3-methylcholanthrene
194-59-2	7H-Dibenzo(c,g)carbazole
205-82-3	benzo[j]fluoranthene
226-36-8	Dibenz(a,h)acridine
224-42-0	Dibenz(a,j)acridine
192-65-4	DIBENZO(A,E)PYRENE
189-64-0	Dibenzo(a,h)pyrene
189-55-9	Dibenzo(a,i)pyrene

· **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.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

75-09-2	dichloromethane	B2
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· **IARC (International Agency for Research on Cancer)**

75-09-2	dichloromethane	2B
194-59-2	7H-Dibenzo(c,g)carbazole	2B
205-82-3	benzo[j]fluoranthene	2B
226-36-8	Dibenz(a,h)acridine	2B
224-42-0	Dibenz(a,j)acridine	2B
192-65-4	DIBENZO(A,E)PYRENE	2B
189-64-0	Dibenzo(a,h)pyrene	2B

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189-55-9	Dibenzo(a,i)pyrene	2B
· NTP (National Toxicology Program)		
75-09-2	dichloromethane	R
194-59-2	7H-Dibenzo(c,g)carbazole	R
205-82-3	benzo[j]fluoranthene	R
226-36-8	Dibenz(a,h)acridine	R
224-42-0	Dibenz(a,j)acridine	R
192-65-4	DIBENZO(A,E)PYRENE	R
189-64-0	Dibenzo(a,h)pyrene	R
189-55-9	Dibenzo(a,i)pyrene	R
· TLV (Threshold Limit Value established by ACGIH)		
75-09-2	dichloromethane	A3
· NIOSH-Ca (National Institute for Occupational Safety and Health)		
75-09-2	dichloromethane	
· OSHA-Ca (Occupational Safety & Health Administration)		
75-09-2	dichloromethane	

· Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard symbols:

Toxic

Highly flammable

· Hazard-determining components of labelling:

methyl alcohol

dichloromethane

benzo[j]fluoranthene

· Risk phrases:

May cause cancer.

Highly flammable.

Also toxic by inhalation, in contact with skin and if swallowed.

Also toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

Limited evidence of a carcinogenic effect.

· Safety phrases:

Avoid exposure - obtain special instructions before use.

Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

This material and its container must be disposed of as hazardous waste.

16 Other information

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· **Department issuing MSDS:** Safety and Health

· **Contact:**

With in the USA: 1-(800)-762-4000

Out side the USA: 1-(203)-712-8488

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

USA