

# Safety data sheet

Printing date 09.03.2021

Version number 1

Revision: 09.03.2021

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

### Product identifier

**Trade name:** Benzene

**EC number:**  
200-753-7

**Index number:**  
601-020-00-8

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

#### Manufacturer/Supplier:

Kuwait Paraxylene Production Company (KPPC)  
Kuwait Petroleum Corporation Building, Gulf Road, 2nd Floor, Office 290, Kuwait  
Tel: +9652388-3866  
Email: PICPXContacts@equate.com

## 2 Hazards identification

### Classification of the substance or mixture

Flam. Liq. 2 H225 Highly flammable liquid and vapour.  
Acute Tox. 5 H303 May be harmful if swallowed.  
Acute Tox. 1 H310 Fatal in contact with skin.  
Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2A H319 Causes serious eye irritation.  
Muta. 1B H340 May cause genetic defects.  
Carc. 1A H350 May cause cancer.  
STOT RE 1 H372 Causes damage to the central nervous system and the hematopoietic system through prolonged or repeated exposure.  
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

### Label elements

#### GHS label elements

The substance is classified and labelled according to the Globally Harmonised System (GHS).

#### Hazard pictograms:



GHS02 GHS06 GHS08

**Signal word:** Danger

#### Hazard-determining components of labelling:

benzene

#### Hazard statements:

Highly flammable liquid and vapour.  
May be harmful if swallowed.  
Fatal in contact with skin.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause genetic defects.  
May cause cancer.  
Causes damage to the central nervous system and the hematopoietic system through prolonged or repeated exposure.

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May be fatal if swallowed and enters airways.

**Precautionary statements:**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Do NOT induce vomiting.

Specific treatment (see on this label).

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTER/doctor if you feel unwell.

Take off immediately all contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards****Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

## 3 Composition/information on ingredients

**Substances****CAS Number. Description.**

71-43-2 benzene

**Identification number(s)**

**EC number:** 200-753-7

**Index number:** 601-020-00-8

**Hazardous components:** benzene  $\geq 99.8\%$

## 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 is recommended.

In case of irregular breathing or respiratory arrest provide artificial respiration.

**After inhalation:** In case of unconsciousness place patient stably in the recovery position.

**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:** Call for a doctor immediately.

**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 Firefighting measures

### Extinguishing media

**Suitable extinguishing agents:**

LARGE FIRE: Use water spray, water fog or foam. DO NOT use direct water jet.

SMALL FIRE: Dry powder or carbon dioxide (CO<sub>2</sub>) extinguisher, dry sand or fire fighting 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**

Use respiratory protective device.

Use personal protective equipment. Keep unprotected persons away.

**Environmental precautions** Prevent seepage into sewage system, workpits and basements.**Methods and material for containment and cleaning up**

Ensure adequate ventilation.

Dispose contaminated material as waste according to item 13.

**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.

## 7 Handling and storage

**Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

**Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

**Conditions for safe storage, including any incompatibilities****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 container tightly closed.

Store in cool, dry conditions in well sealed receptacles.

**Specific end use(s):** No further relevant information available.

## 8 Exposure controls/personal protection

**Control parameters****Ingredients with limit values that require monitoring at the workplace:** Not required.**Additional information:** The lists valid during the making 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  
Store protective clothing separately.  
Avoid contact with the eyes and skin.

#### Respiratory protection:

In case of brief exposure use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

#### 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. Select the glove material based on a 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.

#### Penetration time of glove material:

The exact break through time must be determined by the manufacturer of the protective gloves.

#### Eye protection:



Safety goggles (EN 166).

Goggles recommended during refilling

**Body protection:** Protective work clothing.

## 9 Physical and chemical properties

### Information on basic physical and chemical properties

#### General Information

##### Appearance:

**Form:** Liquid.  
**Colour:** Colourless.

**Odour:** Aromatic.  
**Odour threshold:** Not determined.

**pH-value:** Not determined.

**Melting point/freezing point:** Not determined.

**Initial boiling point and boiling range:** 80 °C

**Flash point:** -11.63 °C

**Flammability (solid, gas):** Not determined.

**Ignition temperature:** Not determined.

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|  |  |
|--|--|
| <b>Decomposition temperature:</b>              | Not determined.  |
| <b>Explosive properties:</b>                   | Product is not explosive. However, formation of explosive air/vapour mixtures is possible. |
| <b>Explosion limits:</b>                       |  |
| <b>Lower:</b>                                  | 1.3 Vol %  |
| <b>Upper:</b>                                  | 8 Vol %  |
| <b>Oxidising properties</b>                    | Not determined.  |
| <b>Vapour pressure at 20 °C:</b>               | 75 mmHg  |
| <b>Density:</b>                                | Not determined.  |
| <b>Relative density</b>                        | Not determined.  |
| <b>Vapour density</b>                          | Not determined.  |
| <b>Evaporation rate</b>                        | Not determined.  |
| <b>Solubility in / Miscibility with Water:</b> | Slightly soluble.  |
| <b>Partition coefficient: n-octanol/water:</b> | Not determined.  |
| <b>Viscosity:</b>                              |  |
| <b>Dynamic:</b>                                | Not determined.  |
| <b>Kinematic:</b>                              | Not determined.  |
| <b>Other information</b>                       | 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 and stored 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.

## 11 Toxicological information

**Information on toxicological effects****Acute toxicity****LD/LC50 values:****71-43-2 benzene**

|            |         |                    |
|------------|---------|--------------------|
| Oral       | LD50    | 4,894 mg/kg (Rat)  |
| Dermal     | LD50    | 48 mg/kg (Mouse)   |
| Inhalative | LC50/4h | 9,980 mg/L (Mouse) |

**Primary irritant effect:****Skin corrosion/irritation:** Irritant to skin and mucous membranes.**Serious eye damage/irritation:** Irritating effect.**Respiratory or skin sensitisation:** No sensitising effects known.**Additional toxicological information:** Danger through skin adsorption.**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**

Muta. 1B, Carc. 1A

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## 12 Ecological information

### Toxicity

**Aquatic toxicity:** No further relevant information available.

**Persistence and degradability** No further relevant information available.

**Bioaccumulative potential** No further relevant information available.

**Mobility in soil** No further relevant information available.

### Additional environmental information:

#### General notes:

Water hazard class 3 (German Regulation) (Assessment by list): 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:** Not applicable.

**vPvB:** Not applicable.

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

## 13 Disposal considerations

### Waste treatment methods

**Recommendation:** Do not allow product to reach sewage system.

### Uncleaned packaging:

#### Recommendation:

Disposal must be made in accordance with official regulations.

Packaging that may not be cleansed must be disposed of in the same manner as the product.

## 14 Transport information

### UN Number

ADR, IMDG, IATA

UN1114

### UN proper shipping name

ADR

1114 BENZENE solution

IMDG, IATA

BENZENE solution

### Transport hazard class(es)

ADR, IMDG, IATA



Class

3 Flammable liquids.

Label

3

### Packing group

ADR, IMDG, IATA

II

### Environmental hazards

Not applicable.

### Special precautions for user

Warning: Flammable liquids.

**Hazard identification number (Kemler code):**

33

**EMS Number:**

F-E,S-D

**Stowage Category**

B

**Stowage Code**

SW2 Clear of living quarters.

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

Not applicable.

**Transport/Additional information:**
**ADR**
**Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

D/E

**Tunnel restriction code:**
**IMDG**
**Limited quantities (LQ)**
**Excepted quantities (EQ)**

1L

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

## 15 Regulatory information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**
**GHS label elements**

The substance is classified and labelled according to the Globally Harmonised System (GHS).

**Hazard pictograms:**


GHS02 GHS06 GHS08

**Signal word:** Danger

**Hazard-determining components of labelling:**

benzene

**Hazard statements:**

Highly flammable liquid and vapour.

May be harmful if swallowed.

Fatal in contact with skin.

Causes skin irritation.

Causes serious eye irritation.

May cause genetic defects.

May cause cancer.

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

May be fatal if swallowed and enters airways.

**Precautionary statements:**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Do NOT induce vomiting.

Specific treatment (see on this label).

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTER/doctor if you feel unwell.

Take off immediately all contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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**Directive 2012/18/EU****Named dangerous substances - ANNEX I**

None of the ingredients are listed.

Substance is not listed.

**Seveso category**

H1 ACUTE TOXIC

P5c FLAMMABLE LIQUIDS

**Qualifying quantity (tonnes) for the application of lower-tier requirements** 5 t**Qualifying quantity (tonnes) for the application of upper-tier requirements** 20 t**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.

**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.

**Abbreviations and acronyms:**

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

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 5: Acute toxicity - oral – Category 5

Acute Tox. 1: Acute toxicity - dermal – Category 1

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Muta. 1B: Germ cell mutagenicity – Category 1B

Carc. 1A: Carcinogenicity – Category 1A

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

Asp. Tox. 1: Aspiration hazard – Category 1