
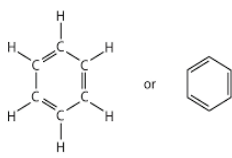


SAFETY DATA SHEET		PR/EOHD/OHS/F-310	
PRODUCT NAME : BENZENE			بترو رابغ Petro Rabigh
Reference No. SDS-09-0025	Revision No. 1.3 January 6, 2019	Page 1 of 11	

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

1.1 Product Identifier	
Product Name:	Benzene
Other/Generic Names:	Benzol, Benzine, Cyclohexatrene, Phene, Phenyl hydride
REACH Registration Number:	01-2119447106-44-xxxx
EC Number:	200-753-7
CAS Number:	71-43-2
Molecular formula:	C ₆ H ₆
Molecular Structure:	
Molecular weight range:	78.12 g/mol

1.2 Relevant identified uses of the substance or mixture and uses advised against

IDENTIFIED USES: Manufacture of substances
MOST COMMON TECHNICAL FUNCTION OF SUBSTANCE (WHAT IT DOES): Laboratory chemical
USES BY CONSUMERS ADVISED AGAINST: No data available


1.3 Manufacturer or supplier's details

Manufacturer	Rabigh Refining and Petrochemical Company		
Address	PLANT PO Box 101, Rabigh 21911, Kingdom of Saudi Arabia Tel: +966 12 425 0390 Free Number : 800 440 9000		
E-mail address of person responsible for this SDS	stephane.dallaire@petrorabigh.com		
Emergency telephone numbers (24-hour)	Asia Pacific (except China):	CareChem 24 +65 3158 1074	English, Cantonese, Indonesian, Japanese, Korean, Malay, Mandarin, Thai, Vietnamese
	China (Off-land):	CareChem 24 +86 512 8090 3042	English, Mandarin
	US, Canada: Outside above area:	ChemTrec 1-800-424-9300 +703-527-3887	English
	Europe, America, Middle East, Africa (Europe & English Speaking):	CareChem 24 +44 (0) 1235 239 670	English, Albanian, Bulgarian, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serb-Croat, Slovak, Spanish, Swedish, Turkish, Ukrainian
	Middle East & Africa (Arabic speaking):	CareChem 24 +44 (0) 1235 239 671	English, Arabic, French

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Product Definition:	Benzene
Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]:	Flammable Liquid – Category 2 Skin Corrosion/Irritation – Category 2 Serious Eye Damage/Eye Irritation – Category 2 Germ Cell Mutagenicity – Category 1B

SAFETY DATA SHEET		PR/EOHD/OHS/F-310	
PRODUCT NAME : BENZENE			بترو رابغ Petro Rabigh
Reference No. SDS-09-0025	Revision No. 1.3 January 6, 2019	Page 2 of 11	

	Carcinogenicity – Category 1 Specific Target Organ Toxicity (Repeated Exposure; Bone Marrow) – Category 1												
Classification according to Directive 67/548/EEC [DSD]:	<table border="0"> <tr> <td>F</td> <td>Highly Flammable</td> <td>R11</td> </tr> <tr> <td>T</td> <td>Toxic</td> <td>R23, R24</td> </tr> <tr> <td>Xn</td> <td>Harmful</td> <td>R65</td> </tr> <tr> <td>Xi</td> <td>Irritant</td> <td>R37</td> </tr> </table> <p>See Section 16 for the full text of the R Phrases.</p>	F	Highly Flammable	R11	T	Toxic	R23, R24	Xn	Harmful	R65	Xi	Irritant	R37
F	Highly Flammable	R11											
T	Toxic	R23, R24											
Xn	Harmful	R65											
Xi	Irritant	R37											


2.2 Label elements

Hazard pictograms (Labelling according Regulation (EC) No 1272/2008):	
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Signal word:	Danger
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Hazard statements:	<p>H225: Highly flammable liquid and vapour H304: Aspiration hazard (Category 1) H315: Causes skin irritation H319: Eye irritation (Category 2) H340: May cause genetic defects H350: May cause cancer H372: Causes damage to organs through prolonged or repeated exposure</p>
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Precautionary statements	<p>Prevention:</p> <p>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. P233: Keep container tightly closed. 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. P260: Do not breathe dust/fume/gas/mist/vapor/spray. P264: Wash skin thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P280: Wear protective gloves/ eye protection/ face protection. P281: Use personal protective equipment as required.</p> <p>Response:</p> <p>P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. P303 + P361 + P353: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. 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. P331 Do NOT induce vomiting. P332 + P313: If skin irritation occurs: Get medical advice/ attention. P337 + P313: If eye irritation persists: Get medical advice/attention</p> <p>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. P233: Keep container tightly closed. 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. P260: Do not breathe dust/fume/gas/mist/vapor/spray. P264: Wash skin thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P280: Wear protective gloves/ eye protection/ face protection. P281: Use personal protective equipment as required.</p> <p>Response:</p>
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SAFETY DATA SHEET		PR/EOHD/OHS/F-310	
PRODUCT NAME : BENZENE			بترو رابغ Petro Rabigh
Reference No. SDS-09-0025	Revision No. 1.3 January 6, 2019	Page 3 of 11	

	P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P303 + P361 + P353: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. 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. P331: Do NOT induce vomiting. P332 + P313: If skin irritation occurs: Get medical advice/ attention. P337 + P313: If eye irritation persists: Get medical advice/
Response:	Get medical attention if you feel unwell
Storage:	Not applicable
Disposal:	Not applicable
Supplemental label elements:	Not applicable
Special packaging requirements	
Containers to be fitted with child-resistant fastenings:	Not applicable
Tactile warning of danger:	Not applicable
2.3 Other hazards	
Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII:	Not applicable
Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII:	Not applicable
Other hazards which do not result in classification:	This substance/mixture contains no components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Classification of the substance or mixture					
Substance/mixture			Benzene		
Product/ingredient name	Identifiers	%	Classification		
			Directive 1999/45/EC	Regulation (EC) No. 1272/2008 [CLP/GHS]	Type
Benzene	EC: 200-753-7	100%	F, T, Xn, Xi, R11, R23, R24, R36, R37, R38, R65, R51/53	Flam. Liq. 2; Eye Irritant; STOT RE 1;	[A]
	CAS: 71-43-2		See section 16 for the full text of the R-phrases	See section 16 for the full text of the H-phrases	


There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

[A] Constituent; [B] Impurity; [C] Stabilizing additive; Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures	
Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway, and loosen tight clothing such as a collar and belt.
Skin contact	Wash off contaminated skin with soap and flush with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small

SAFETY DATA SHEET		PR/EOHD/OHS/F-310	
PRODUCT NAME : BENZENE			
Reference No. SDS-09-0025	Revision No. 1.3 January 6, 2019	Page 4 of 11	

	quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects	
Eye contact	Refer to section 2.2
Inhalation	Refer to section 2.2
Skin contact	Skin absorption may cause effects similar to those described for inhalation.
Ingestion	May damage lungs, cause burning sensation in the mouth, throat and stomach. May result in gastrointestinal disturbances and others similar to those described for inhalation.

Over-exposure signs/symptoms

Eye contact	Pain or irritation, watering and redness.
Inhalation	No specific information.
Skin contact	Irritation and redness.
Ingestion	No specific information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if eyes were exposed to large quantities or large quantities have been ingested or inhaled.
Specific treatments	No specific information.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Use alcohol-resistant foam, dry chemical or carbon dioxide (CO ₂).
Unsuitable extinguishing media	High volume water jet.

5.2 Special hazards arising from the substance of mixture

Hazards from the substance or mixture	In a fire or if heated, a pressure increase will occur and the container may burst. Vapour may form explosive mixtures with air. Vapor is heavier than air and may travel along the ground to some distance of ignition and flash back.
Hazardous thermal decomposition products	Decomposition products may include carbon dioxide and carbon monoxide.

5.3 Advice for firefighters


Special protective actions for fire-fighting	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.
Specific protective equipment for fire-fighting	Fire-fighters shall wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection.

SECTION 6: Accidental release measure

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

SAFETY DATA SHEET		PR/EOHD/OHS/F-310	
PRODUCT NAME : BENZENE			بترو رابغ Petro Rabigh
Reference No. SDS-09-0025	Revision No. 1.3 January 6, 2019	Page 5 of 11	

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Small spill
Stop leak if without risk. Move containers from spill area. Dilute with water and mop up and place in an appropriate and properly labeled waste disposal container. Ground vacuum cleaners if used to collect material. Dispose of via a licensed waste disposal contractor.

Large spill
Stop leak if without risk. Remove all sources of ignition. Ensure adequate ventilation. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, silica gel, saw dust, diatomaceous earth and place in containers for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spill product. Ground vacuum cleaners if used to collect material.
Note: see section 1 for emergency contact information and section 13 for waste disposal.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures
Use appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Ensure all equipment is electrically grounded before beginning transfer operations. Empty containers retain product residue and can be hazardous. Do not reuse containers. All containers shall be properly labeled.

Advice on general occupational hygiene
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original containers protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations
No specific information is available.

Industrial sector specific solutions
No specific information is available.


SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

<u>Occupational exposure limits</u>				
Product/ingredient name	Exposure limit values			
Substance	Form	TWA	STEL	Reference
Benzene	Vapour	1 ppm (skin)	5.0 ppm	OSHA 29 CFR 1910.1028 (c) ; 06/2010
	Vapour	0.1 ppm (skin)	1 ppm	NIOSH REL (01/2013)
	Vapour	25 ppm (skin)	50ppm	UK (2013)
	Vapour	0.5 ppm (skin)	2.5 ppm	ACGIH (2016)

Recommended monitoring procedures

SAFETY DATA SHEET		PR/EOHD/OHS/F-310	
PRODUCT NAME : BENZENE			Petro Rabigh
Reference No. SDS-09-0025	Revision No. 1.3 January 6, 2019		Page 6 of 11

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Derived No Effect Levels (DNEL)

Product/ingredient name	Exposure	Population	Value	Effects
Benzene	Long term Dermal	Workers	No data available	No data available
	Acute term Inhalation	Workers	No data available	No data available
	Long term Inhalation	Workers	No data available	No data available
	Long term Dermal	Consumers	No data available	No data available
	Long term Inhalation	Consumers	No data available	No data available
	Ingestion	Consumers	No data available	No data available

Predicted No Effect Concentrations (PNEC)


Product/ingredient name	Compartment Detail	Value	Method Details
Benzene	Fresh water	No data available	-
	Marine water	No data available	-
	Soil	No data available	-
	Fresh water sediment	No data available	-
	Sewage Treatment Plant	No data available	-

8.2 Exposure controls

Appropriate engineering controls	If user operations generate vapour or mists, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
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Individual protection measures

Hygiene measures:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mist, gases or dusts. Recommended: Face shield and safety glasses with side-shields. Equipment must be approved by NIOSH (USA) or EN 166 (EU).
Skin protection	
Hand protection:	Chemical-resistant, impervious gloves complying with an approved standard (EU Directive 89/686/EEC and standard EN 374 derived from it or NIOSH of USA) shall be worn at all times when handling chemical products if a risk assessment indicates this are necessary. For 8-hour full or splash contact with the material, use gloves made of fluorinated rubber with minimum layer thickness of 0.7 mm.
Body protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Flame retardant antistatic protective clothing shall be used.
Other skin protection:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. If used in solution, or mixed with other substances, contact suppliers of approved gloves and skin protection. This is only advisory and must be evaluated on a case-to- case basis by specialists.
Respiratory protection:	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary or as backup to engineering controls. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: organic vapor filter shall be approved by appropriate government standards such as NIOSH (USA) or CEN (EU).
Environmental exposure controls:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SAFETY DATA SHEET		PR/EOHD/OHS/F-310	 بترو رابغ Petro Rabigh
PRODUCT NAME : BENZENE			
Reference No. SDS-09-0025	Revision No. 1.3 January 6, 2019	Page 7 of 11	

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical state:	Liquid
Color:	Colorless, Yellowish
Odor:	Characteristic aromatic odor.
Odor threshold :	No information available
pH:	No applicable
Melting point/freezing point range:	5.49°C;(literature)
Boiling point:	80.09°C at 1.0134 hPa; (literature)
Flash point:	-11.0 °C (Closed Cup)
Evaporation rate (Butyl acetate=1.0):	No data available
Flammability (solid, gas):	
Burning time:	No data available
Burning rate:	No data available
Upper/lower flammability or explosive limits:	Lower: 0.9% (v/v) Upper: 6.5% (v/v)
Vapour Pressure:	10.0 kPa (75.0 mmHg) at 20 °C (literature)
Vapour Specific Gravity (Air=1):	2.7
Specific gravity (water =1.0)	0.88
Solubility(ies):	1.886g/l at 25 °C
Partition coefficient; n-octane/water:	Log Pow: 2.13 at 23 °C
Auto-ignition temperature:	425.0 °C
Decomposition temperature:	No data available
Viscosity:	0.604 mPa.s (0.604 cP)
Explosive properties:	No data available
Oxidizing properties:	No data available

9.2 Other information

Surface tension:	27.69 mN/m at 25 °C
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SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product.

10.2 Chemical stability

The product is stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid


Keep away from heat, sparks and flame.

10.5. Incompatible materials


Oxidizing agents

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SAFETY DATA SHEET		PR/EOHD/OHS/F-310	
PRODUCT NAME : BENZENE			بترو رابغ Petro Rabigh
Reference No. SDS-09-0025	Revision No. 1.3 January 6, 2019	Page 8 of 11	


SECTION 11: Toxicological information				
11.1 Information on toxicological effects				
Acute Toxicity				
Product/ingredient name	Result	Species	Dose	Method of Exposure
Benzene	Respiratory sensitization	No information available	-	-
	LC50 Inhalation	Rat	10,000 ppm	7-hour
		Rat	44.5 mg/l	4-hour
	LD50 Dermal	Rabbit	>8,260 mg/kg	-
	LD50 Oral	Rat	930 mg/kg	-
		Rat (female)	>2,000 mg/kg	-
	NOEL (Oral)	Rat (female)	50 mg/kg	0, 50, 100, 200 mg/kg; exposure for 103 wk
	LOEL (Oral)	No information available	-	-
Irritation	Serious eye irritation	No information available	-	-
	Skin irritation	No information available	-	-
	Eyes: moderate irritant	Rabbit	88 mg	-
	Eyes: Severe irritant	Rabbit	2 mg	24 hours
	Skin: Mild irritant	Rat	8 µL	8 hours
Corrosion	Skin: Mild irritant	Rabbit	15 mg	24 hours
	Skin: Moderate irritant	Rabbit	20 mg	24 hours
Sensitization:	No information available	-	-	-
Mutagenicity	No information available	-	-	-
Germ cell mutagenicity	No information available	-	-	-
Carcinogenicity:	No information available	-	-	-
Reproductive toxicity:	No information available	No data available	-	-
Teratogenicity:	No information available	-	-	-
Specific target organ toxicity STOT (single exposure): May cause respiratory irritation				
Specific target organ toxicity STOT (repeated exposure) Bone marrow; Category 1				
Aspiration Hazards:	May be fatal if swallowed and enter airways			
Information on the likely routes of exposure:	No information available			
Potential acute health effects				
Eye contact:	May cause irreversible eye damage			
Inhalation:	Irritation of the mucous membranes. Causes headache, drowsiness or other effects to the central nervous system.			
Skin contact:	May degrease the skin			
Ingestion:	Harmful if swallowed. Causes lung damage. Causes headache, drowsiness or other effects to the central nervous system.			
Symptoms related to the physical, chemical and toxicological characteristics				
Eye contact:	Adverse symptoms may include pain or irritation, watering and redness			
Inhalation:	No specific data			
Skin contact:	Adverse symptoms may include pain, irritation and redness			
Ingestion:	No specific data			
Delayed and immediate effects and also chronic effects from short and long term exposure				
Short-term exposure				
Potential immediate effects:	Causes irritation of eyes, skin and mucous membranes, headache, drowsiness or other effects to the central nervous system.			
Potential delayed effects:	No data available			

SAFETY DATA SHEET		PR/EOHD/OHS/F-310	
PRODUCT NAME : BENZENE			بترو رابغ Petro Rabigh
Reference No. SDS-09-0025	Revision No. 1.3 January 6, 2019	Page 9 of 11	

Long-term exposure	
Potential immediate effects:	Causes irritation of eyes, skin and mucous membranes, headache, drowsiness or other effects to the central nervous system.
Potential delayed effects:	No data available.
Potential chronic health effects	
Conclusion/summary:	
General:	Toxic to blood, bone marrow, central nervous system (CNS). May be toxic to liver and urinary system. Repeated or prolonged exposure can produce target organs damage.
Carcinogenicity:	Confirmed human carcinogen; 1A by ACGIH, Proven for human; 1 by IARC.
Mutagenicity:	No known significant effects or critical hazards.
Teratogenicity:	No known significant effects or critical hazards.
Developmental effects:	No known significant effects or critical hazards.
Fertility effects:	No known significant effects or critical hazards.
Other information:	None

SECTION 12: Ecological information				
12.1 Toxicity				
Acute Toxicity				
Product/ingredient name	Result	Species	Exposure	Method
Benzene	LC50: 5.3 mg/l	Rainbow trout	96 hours	OECD Test Guideline 203
	EC50:10 mg/l	Water flea	48 hours	OECD Test Guideline 202
	ErC50: 100 mg/l	Green Algae	72 hours	OECD Test Guideline 201
Conclusion/summary:	No specific data available			
12.2 Persistence and degradability				
Conclusion/summary:	Expected to be readily biodegradable. Not considered to be very persistent and very bioaccumulating (vPvB).			
12.3 Bioaccumulative potential				
Conclusion/summary:	No data available			
12.4 Mobility in soil				
Conclusion/summary:	No data available			
12.5 Results of PBT and vPvB assessment				
Not considered to be very persistent and very bioaccumulating (vPvB).				
12.6 Other adverse effects				
Harmful to aquatic life with long lasting effects.				

SECTION 13: Disposal considerations	
<i>The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).</i>	
13.1 Waste treatment methods	
Product	
Methods of disposal:	The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
Hazardous waste:	The classification of the product may meet the criteria for a hazardous waste.

SAFETY DATA SHEET		PR/EOHD/OHS/F-310	 بترو رابغ Petro Rabigh
PRODUCT NAME : BENZENE			
Reference No. SDS-09-0025	Revision No. 1.3 January 6, 2019	Page 10 of 11	

Packaging	
Methods of disposal:	The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Special precautions:	This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1 UN number	1114	1114	1114	1114
14.2 UN proper shipping name	Benzene	Benzene	Benzene	Benzene
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes	Not available	Yes	No
14.6 Special precautions for user	No data available	No data available	No data available	No data available
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No data available	No data available	No data available	No data available

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH): Planned to be registered.

Annex XIV - List of substances subject to authorization
Substances of very high concern
 No data available

Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
 No data available

Other EU regulations

Europe inventory: All components are listed or exempted.

Black List Chemicals: Not listed

Priority List Chemicals: No data available

Integrated pollution prevention and control list (IPPC) - Air: No data available

Integrated pollution prevention and control list (IPPC) - Water: No data available

International regulations


Chemical Weapons Convention List Schedule I Chemical: Not listed

Chemical Weapons Convention List Schedule II Chemicals: Not listed

Chemical Weapons Convention List Schedule III Chemicals: Not listed

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

SAFETY DATA SHEET		PR/EOHD/OHS/F-310	 بترو رابغ Petro Rabigh
PRODUCT NAME : BENZENE			
Reference No. SDS-09-0025	Revision No. 1.3 January 6, 2019	Page 11 of 11	

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms: None

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flammable	Flash point measurement
Eye and skin irritant	Expert judgement
STOT SE 3, H333	Expert judgement

Full text of abbreviated H statements:
 H225: Highly flammable liquid and vapour
 H304: Aspiration hazard (Category 1)
 H315: Causes skin irritation
 H319: Eye irritation (Category 2)
 H340: May cause genetic defects
 H350: May cause cancer
 H372: Causes damage to organs through prolonged or repeated exposure

Full text of classifications[CLP/GHS]:
 Acute Toxicity No data available
 STOT RE 1; H350 STOT-Single exposure (Category 3); Respiratory system

Full text of abbreviated R phrases
 R11; Highly flammable
 R23: Toxic by inhalation
 R24: Toxic in contact with skin
 R36: Irritating to eyes
 R37: Irritating to respiratory system
 R38: Irritating to skin
 R65: Harmful: may cause lung damage if swallowed
 R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of abbreviated P phrases
 P261: Avoid breathing fume/gas/mist/vapours/spray.
 P273: Avoid release to the environment.
 P301 + p310: SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P331: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Full text of classifications[DSD/DPD]
 F: Flammable
 Xn: Harmful
 Xi: Irritant
 N: Dangerous for the environment

Date of issue/ Date of revision: 01/06/2019

Date of previous issue: 11/07/2018

Version 1.3

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