



<b>MATERIAL SAFETY DATA SHEET</b>		PR/EHD/OH/F-310 (A)	 بترو رابغ Petro Rabigh
<b>PRODUCT NAME : RABIGH TREATED WHOLE NAPHTHA</b>			
MSDS Reference No. MSDS-09-0010	REV NO. 1.3 April 24, 2019	Page 1 of 4	

### SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT DESCRIPTION:</b>	Rabigh Untreated Whole Naphtha		
<b>CHEMICAL FAMILY:</b>	Hydrocarbons	<b>24-HOUR EMERGENCY TELEPHONE NUMBERS</b>	
<b>GRADE NAME:</b>	A-316	Asia Pacific (except China) :	CareChem: +65 3158 1074
		China off-land:	CareChem: +86 512 8090 3042
		Europe, America, Middle East & Africa (English):	CareChem: +44 (0) 1235 239 670
		US and Canada (English):	ChemTrec: 1-800-424-9300
		Outside above area (English):	ChemTrec: +703-527-3887
<b>CHEMICAL FORMULA SYNONYMS:</b>	Naphtha, Petroleum Distillates; Aviation kerosene	Middle East & Africa:	+44 (0) 1235 239 671
<b>MANUFACTURER'S NAME AND ADDRESS:</b>	Rabigh Refining and Petrochemical Company PO Box 101, Rabigh 21911 Kingdom of Saudi Arabia.		
		<b>Tel:</b>	<b>+966 12 425 0390</b>
		<b>Free number:</b>	<b>800 440 9000</b>
<b>E-mail address for person responsible for this MSDS:</b>	<a href="mailto:dallaisx@petrorabigh.com">dallaisx@petrorabigh.com</a>		

### SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS	% (by volume)	CAS #	EINECS #	HAZARD SYMBOL	RISK & SAFETY PHRASES
Paraffins	Min 72	-	-		R12, R27/28, R38, R45, R65 S7, S16, S23, S24/25, S45, S53, S61, S62
Olefins	Max 1	-	-		
Aromatic	Max 10	-	-		
Lead	Max 50ppb (wt)	-	-		
Sulfur, Mercaptans	Max 10 ppm (wt)	-	-		
Hydrogen Sulfide	Max 5ppm (wt)	7783-06-4	231-977-3		

Note: This product is considered hazardous under USA OSHA 29 CFR 1910.1200.

### SECTION 3 - HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** Extremely flammable liquid and vapor. Contains benzene, which is classified as A1 carcinogen by ACGIH. The substance is toxic to skin, eyes and the central nervous system.

**ROUTES OF ENTRY:** Inhalation, skin and ingestion.

**POTENTIAL HEALTH EFFECTS:**

**Inhalation:** Vapors or mists may cause irritation of the nose and throat, headache, nausea, vomiting, dizziness, drowsiness, euphoria, loss of coordination, and disorientation.

**Skin:** Prolonged or widespread skin contact may result in the absorption of potentially harmful amounts of material.

Brief contact may cause slight irritation. Prolonged contact, as with clothing wetted with material, may cause more severe irritation and discomfort, seen as local redness and swelling.

**Eyes:** May cause irritation, experienced as mild discomfort and seen as slight excess redness of the eye.

**Ingestion:** Cause abdominal discomfort, nausea and diarrhoea may occur. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

**Carcinogenicity:** The product contains benzene; classified as A1 carcinogen. Prolonged and repeated exposure to benzene has been associated with a plastic anemia and leukemia in humans.

**Aggravation of Pre-Existing Medical Conditions:** Because of its irritating properties, repeated skin contact may aggravate an existing dermatitis (skin condition).


### SECTION 4 - FIRST AID MEASURES

**Inhalation:** Remove to fresh air. If the victim has breathing difficulty or is dizzy and unresponsive give 100% oxygen or Cardio Pulmonary Resuscitation (CPR). Rush to nearest medical facility.

**Skin:** Remove any contaminated clothing. Thoroughly rinse the skin with mild soap and water. If persistent irritation occurs, obtain medical attention. On contact with molten product immediately immerse in or flush with large amounts of cold water to dissipate heat. Do not attempt to remove the material or clothes sticking to the skin. Obtain medical help.

**Eyes:** Check for and remove contact lenses if worn. Immediately flush eyes with running water for minimum of 15 minutes with eyelids open. Transport to nearest medical facility for additional treatment.

**Ingestion:** Although first aid is normally not required, do not induce vomiting. If victim is alert, rinse mouth. Do not give liquids to a drowsy, convulsing or unconscious person. Transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below the hips to prevent aspiration.

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## SECTION 5 - FIRE FIGHTING MEASURES

**Flash Point/Range:** Not available; Extremely flammable liquid and vapor

**Flammable Range:** Not available. Flammable in open flames and sparks.

**Auto ignition Temperature:** Not Available

**Extinguishing Media:** Water fog, dry powder, foam or carbon dioxide. Never use water jet for extinguishing fires.

**Small Fires:** Use a hand-held extinguisher, can normally be fought by a person who has received instruction on the hazards of flammable liquid fires.

**Large Fires:** Use water fog, dry powder, foam or carbon dioxide. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water fog to disperse the vapours and to provide protection for personnel attempting to stop the leak. Never use water jet for extinguishing fires.

**Fire Fighting Procedures:** Wear full protective clothing and self contained breathing apparatus with a full piece operated in a positive pressure mode. Evacuate the area of non essential personnel. Stay upwind and fight fire from safe distance. Keep the adjacent containers cool by spraying water. Water in a straight hose stream may cause fire to spread and should be used as a cooling medium only.

**Unusual Fire and Explosion Hazards:** Vapours are heavier than air and may travel a considerable distance to a source of ignition and flash back. Flowing product can generate static electricity and cause a fire or explosion if a spark occurs in a flammable vapour-air atmosphere. When handling, use non-sparking tools, ground and bond all containers.

**Hazardous Combustion Products:** Combustion will produce carbon and nitrogen oxides and unidentified organic compounds.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

Observe relevant local regulations and notify authorities in the event of exposure to general public or environment. Remove all sources of ignition. Spilled material will make the surface extremely slippery so keep walking surface free from material. Wear protective equipment (section 8). Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal - caution, flammable vapors may accumulate in closed containers. Response and clean-up crews must be properly trained and must utilize proper protective equipment.

## SECTION 7 - HANDLING AND STORAGE

### Handling:

Keep in a tightly closed container. Store in a cool, dry, corrosion-proof, ventilated area away from moisture, sources of heat or ignition, combustibles and oxidizers. Protect against physical damage. Avoid dust formation and control ignition sources. Employ spark-proof tools, grounding, and venting and explosion relief provisions in accord with accepted engineering practices in any process capable of generating dust and/or static electricity. Empty only into inert or non-flammable atmosphere. Emptying contents into a non-inert atmosphere where flammable vapors may be present could cause a flash fire or explosion due to electrostatic discharge. For guidance on PPE selection see Section 8.

### Storage:

Store in a cool dry place away from direct sunlight especially for extended storage periods; store rooms should be clean, dry and contaminant free. Keep the containers tightly closed. Storages should be well ventilated and away from incompatibles and sources of ignition. Employ grounding, venting and explosion relief provisions in accord with accepted engineering practices in any process capable of generating dust and/or static electricity. Empty only into inert or non-flammable atmosphere. Emptying contents into a non-inert atmosphere where flammable vapors may be present could cause a flash fire or explosion due to electrostatic discharge.

## SECTION 8 - EXPOSURE LIMITS / PERSONAL PROTECTION

COMPONENTS	OSHA PEL (2008)			ACGIH TLV (2008)		
	TWA	STEL	CEILING	TWA	STEL	CEILING
Naphtha	Not Available	-	-	-	-	-
Benzene	1 ppm	5 ppm	-	0.5 ppm	2.5 ppm	-

**ENGINEERING CONTROLS:** If the operations involve generation of vapors and mist, employ adequate ventilation to keep the airborne vapor and mist below the recommended occupational exposure limits. The use of closed system or adequate general or local exhaust ventilation is recommended. Controls also needed to keep dust concentration below the explosive limits. Storage and material handling areas should have eyewash and safety shower facilities installed.


**RESPIRATORY PROTECTION:** If engineering controls do not maintain airborne concentrations to a level which is adequate to protect workers health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers.

When respiratory protection is required, use appropriate NIOSH approved air purifying respirators with organic vapors and mist filter cartridges.

**WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

In case of oxygen deficiency use positive pressure supplied air respirator.

For emergency and other conditions when exposure may be greatly exceeded use an approved positive pressure Self Contained Breathing Apparatus (SCBA).

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**RESPIRATORY PROTECTION:** Use NIOSH/MSHA approved respirators when vapors or mist concentrations exceed permissible exposure limits.

**SKIN PROTECTION:** Wear impervious protective clothing such as nitrile gloves, apron, boots or whole bodysuit, as appropriate.

**EYE AND FACE PROTECTION:** Wear safety glasses with side shields or goggles when handling this material.

**OTHER PROTECTIVE/SAFETY EQUIPMENT:** Maintain eye wash fountain, quick drench and safety shower facility at the site of material handling.

**WORK/HYGIENIC PRACTICES:** Wash hands, forearms and face thoroughly after handling product. Wash hands before eating, drinking and smoking. Launder contaminated clothing before re-use. Maintain PPE in clean and hygienic conditions.

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance And Odor:</b> , Clear liquid with hydrocarbon odor	<b>Vapor Pressure:</b> Reid Max 10.0 psia
<b>pH:</b> Not applicable	<b>Specific Gravity:</b> Max 0.725, 60°F/60°F; Lighter than water
<b>Melting Point/Range:</b> Not Applicable	<b>Molecular Weight:</b> Mixture: 87 to 114
<b>Boiling point/range:</b> Not Available	<b>Solubility In Water:</b> Negligible
<b>Flash Point/Range:</b> Not Available; Extremely Flammable	<b>Viscosity (cSt @ -20°C):</b> Not Available
<b>Flammable Limits/Range:</b> Not Available	<b>Vapor Specific Gravity (Air=1):</b> ; Heavier than air
<b>Autoignition Temperature/Range:</b> Not Available	<b>Evaporation Rate:</b> Not Available, < 1 (n-Butyl Acetate=1)
<b>Percent Volatiles:</b> Not Available	<b>Freezing Point, °C:</b> Not Available

### SECTION 10 - STABILITY AND REACTIVITY

**STABILITY:** Stable under normal conditions of use. Reacts with strong oxidizing agents. Protect from high temperature, open flames, sparks, static discharges and incompatible materials (see below).

**INCOMPATIBILITY (MATERIALS TO AVOID):** Strong oxidizing agents such as halogens and acids.

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:** Carbon and nitrogen oxides and unidentified organic compounds.

**HAZARDOUS POLYMERIZATION:** Will not occur.

### SECTION 11 - TOXICOLOGICAL INFORMATION

**TOXICITY TO ANIMALS:** No data is specifically available for this product and therefore this toxicological information is based on testing completed with the ingredients.

**CHRONIC EFFECTS ON HUMANS:** Exposure to benzene may result in affects to the hematopoietic system causing blood disorders including anaemia and leukaemia. Benzene is classified by EC as a category 1 carcinogen - substances known to be carcinogenic to man. IARC assessment: benzene - carcinogenic in humans (Group 1).

**RESPIRATORY EFFECTS:** May cause irritation of mucous membranes of the nose, throat and upper respiratory tract.

**SENSITIZATION:** No information available

**REPEATED DOSE TOXICITY:** No chronic health effects known

**MUTAGENICITY :** No information available

**CARCINOGENICITY:** ACGIH: A3 (Animal carcinogen as total hydrocarbon vapor). Not listed as carcinogen by NTP and OSHA. IARC has listed kerosene as a probable human carcinogen (2A). NIOSH recommends that whole diesel engine exhaust be regarded as a potential occupational carcinogen.

**REPRODUCTIVE EFFECTS:** No information available.

### SECTION 12 - ECOLOGICAL INFORMATION


Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams, or public waterways. Block off drains and ditches. Provincial regulations require and federal regulations may require that environmental and/or other agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities.

**MOBILITY:** No Information Available.

**PERSISTENCE AND BIODEGRADABILITY:** No Information Available.

**BIO-ACCUMULATIVE POTENTIAL:** No Information Available.

**AQUATIC TOXICITY AND ECOTOXICITY:** Toxic to aquatic life. Product may cause long term adverse effects in the aquatic environment.

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### SECTION 13 - DISPOSAL CONSIDERATIONS

**MATERIAL DISPOSAL METHOD:**  
 Recover or recycle if possible. May be buried at authorized landfill site or be incinerated in a approved chemical incinerator. Waste material disposal should be in accordance with prevailing regional and local regulation. Do not dispose of by uncontrolled incineration or open burning.

**CONTAINER DISPOSAL:**  
 Contaminated containers should be cleaned and disposed of in the same manner as the product in accordance with applicable regulations. Dispose in accordance with prevailing regulation preferably through a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

### SECTION 14 - TRANSPORT INFORMATION

**DOT (Department of Transportation):**  
 UN 1268, HAZARD CLASS 3; Flammable Liquid; Packing Group III.

**PROPER SHIPPING NAME:** Petroleum Distillates, NOS.

### SECTION 15 - REGULATORY INFORMATION

**US Federal regulations:** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List, identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or under CERCLA (40 CFR 302.4).

**Canadian federal regulations :** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations

**REQUIREMENTS OF OTHER COUNTRIES:** Local requirements should be consulted and checked.

### SECTION 16 - OTHER INFORMATION

<b>HMIS HAZARD RATINGS:</b> HEALTH: 2 , FLAMMABILITY: 4 , REACTIVITY: 0  0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe	<b>NFPA CODES:</b> HEALTH: 1, FLAMMABILITY:4 REACTIVITY: 0, SPECIAL: Do NOT use water 0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe
Revision No.: 1.3	4/24/2019
Previous Revision: 1.2	10/31/2018

**DISCLAIMER:**  
 The information is based on our current and best knowledge and is intended to describe the product for the purpose of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Petro Rabigh makes no warranty of any kind, expressed or implied, regarding the accuracy of these data. Petro Rabigh assumes no responsibility for injury from the use of the product described herein.