

MATERIAL SAFETY DATA SHEET

Heavy Hydrocarbon

Tel: (+98) 86-3422-4515 (Company)

Tel: (+98) 86-3823-2049 (Factory)

Kimya Resin Arak Chemical Industrial Co.

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Product Name

Heavy Naphtha

Synonyms

None

Details of the supplier of the safety data sheet

Company

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2. Hazard (s) identification

Hazard Pictograms (GHS-US/CA)



Signal Word (GHS-US/CA)

: Danger

Hazard Statements (GHS-US/CA) : H224 - Extremely flammable liquid and vapour

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H332 - Harmful if inhaled.

H350 - May cause cancer.

H361d - Suspected of damaging the unborn child.

H373 - May cause damage to organs through prolonged or repeated exposure.

H410 - Very toxic to aquatic life with long lasting effects. skin)

H411 - Toxic to aquatic life with long lasting effects.

Hazard summary Physical hazards

Highly flammable.



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Health hazards	May cause cancer. May cause heritable genetic damage. Irritating to skin. Possible risk of impaired fertility. Possible risk of harm to the unborn child. Harmful: may cause lung damage if swallowed.
Environmental hazards	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Specific hazards	Breathing of high vapour concentrations may cause dizziness, light- headedness, headache, nausea and loss of co-ordination. Continued inhalation may result in unconsciousness. Prolonged or repeated contact with skin may cause redness, itching, irritation, eczema/chapping and oil acne. Prolonged and repeated contact with the product may cause skin cancer. Components of the product may be absorbed into the body through the skin. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. Material will float and can be re-ignited on surface of water.
Main symptoms	Irritation of eyes and mucous membranes. Dermatitis. Ingestion may cause irritation and malaise.
Precautionary Statements	 P201 - Obtain special instructions before use. P260 - Do not breathe vapours, spray, mist, gas, and fume. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection. P301+P310+P331 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor. Do NOT induce vomiting. P391 - Collect spillage.
Other hazards	Static accumulator - Static accumulating flammable materials can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite material and vapor may cause flash fire (or explosion).

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3. Composition/Information on Ingredients

Component	CAS-No	Percent
Gas olis	64741-57-7	100
Naphtha (petroleum), heavy catalytic	6471-54-4	100



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4. First-aid measures



General advice	If exposed or concerned: get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.
Description of first aid procedure	<u>es</u>
Eye Contact:	Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
Skin Contact	Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes. If high pressure injection under the skin occurs, always seek medical attention.
Inhalation (Breathing):	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Ingestion (Swallowing):	Rinse mouth thoroughly. Do not induce vomiting without advice from poison control centre. Do not give mouth-to-mouth resuscitation. Get medical attention immediately.
Notes to Physician	Symptoms: Dizziness, Discomfort, Headache, Nausea, Kidney disorders, Liver disorders.
Most important symptoms effects, both acute and Delayed	Skin irritation. Defatting of the skin. Rash. May cause eye irritation on direct and contact. Cyanosis (blue tissue condition, nails, lips, and/or skin). Narcosis. Unconsciousness. Decrease in motor functions. Behavioural changes. Aspiration may cause pulmonary oedema and pneumonitis. Jaundice. Liver enlargement.Oedema. Proteinuria



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	5. Fire-fighting measures		
General fire hazards	The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. Containers may explode when heated.		
Suitable extinguishing med	lia		
	Water spray. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).		
Unsuitable Extinguishing N	Media		
	Do not use a solid water stream as it may scatter and spread fire.		
Specific hazards during fir	e fighting		
	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Withdraw immediately in case of rising sound from venting safety devices or any discolouration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Vapours may form explosive air mixtures even at room temperature. Prevent buildup of vapours or gasses to explosive concentrations. Some of these materials, if spilled, may evaporate leaving a flammable residue. Water runoff can cause environmental damage.		
Special protective equipme	ent for fire-fighters		
	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.		
Hazardous Combustion Products	Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Hydrogen sulfide and oxides of nitrogen and sulfur may also be formed.		



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Diamond	Hazard	Value	Description
	Health	1	Can cause significant irritation
Flammability 3 temper	Liquids and solid that can be ignited under almost all ambient temperature conditions, Materials produce hazardous atmospheres with air under almost all ambient temperatures or, though unaffected by ambient temperatures, are readily ignited under almost all conditions.		
	lnstability	0	Materials that themselves are normally stable, even under fire conditions.
	Special		

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For n	on-emergency	personnel
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For non-emergency personnel	Evacuate personnel to a safe area. Stay upwind/keep distance from source. Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Avoid contact with skin and eyes. Do not breathe vapour/aerosol. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure equipment is adequately earthed. Use explosion-proof equipment_Use only non-sparking tools.
For emergency responders For emergency responders	equipment. Use only non-sparking tools. Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use

Environmental precautions

Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up

Methods for cleaning up

Stop leak if safe to do so. Dam up. Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite or powdered limestone. Collect in closed and suitable containers for disposal. Recover large spills by pumping (use an explosion proof or hand pump). Dispose of as special waste in compliance with local and national regulations. Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases.



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7. Handling and Storage



Precautions for safe handling

Before entering storage tanks and commencing any operation in a confined area check the atmosphere for oxygen content and flammability. Access to work area should be restricted to people handling the product only. Should be handled in closed systems, if possible. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes,

Do not breathe dust/rume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. When using, do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Specific end use(s)

Flammable liquid storage. Do not handle or store near an open flame, heat or other sources of ignition. Keep container tightly closed in a cool, well-ventilated place.

Distribution of a substance. Formulation & (re) packaging of substances and mixtures. Manufacture of substance. Use as an intermediate.



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8. Physical & Chemical Properties			
Appearance	Liquid		
Colour	colourless to yellow		
Odour	petroleum hydrocarbon odour		
Initial boiling point and boiling range	129°C (264.2°F) / 177°C (350.6°F)		
Flash point (ASTM D93)	Free (Closed Cup)		
Final boiling point and boiling range	330°C (626°F) / 343°C (647.6°F)		
РН	No applicable		
Density at 15°C (ASTM D4052/D1298/D7042)	$790 \frac{kg}{m^3} / 810 \frac{kg}{m^3}$		
Flash Point Close Cup (ASTM D93)	Free		
Sulphur Content Range (ASTM D5453/ D4294) 0.19 Wt% / 0.26 Wt%			
Mercaptan Content Range (ASTM D3227 UOP.163)	400 ppm / 1000 ppm		
9. Stability & Reactivity			
<u>Reactivity</u>	Extremely flammable liquid and vapour. The product is stable and non reactive under normal conditions of use, storage and transport.		
<u>Chemical stability</u>	Stable under normal temperature conditions and recommended use.		
Possibility of hazardous reactions	Hazardous reactions do not occur.		
<u>Conditions to avoid</u>	Heat, flames and sparks. Ignition sources. Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.		
Incompatible materials	Strong acids. Strong oxidizers such as nitrates, chlorates, peroxides.		
Hazardous decomposition products	Carbon oxides. As appropriate : Hydrogen sulfide (H2S). SOx. Sulphuric acid.		



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10. Toxicological Information

Acute Toxicity

Inhalation: Harmful if inhaled.

General Product Information

May be fatal if swallowed and enters airways. Occupational exposure to the substance or mixture may cause adverse effects.

B: Component Analysis - LD50/LC50

Gasoline, motor fuel (86290-81-5) Inhalation LC50 Rat >5610 mg/m³; Oral LD50 Rat 5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Information on likely routes of exposure

Potential Health Effects: Skin Corrosion Property/Stimulativeness Causes skin irritation.

Potential Health Effects: Eye Critical Damage/ Stimulativeness Direct contact with eyes may cause temporary irritation.

Potential Health Effects: Ingestion

Ingestion may cause irritation and malaise. Swallowing or vomiting of the liquid may result in aspiration into the lungs.

Potential Health Effects: Inhalation

Vapours may cause drowsiness and dizziness.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

Generative Cell Mutagenicity

This product may cause genetic defects.

Symptoms Irritation of eyes and mucous membranes. Skin irritation. Dermatitis. Ingestion may cause irritation and malaise.



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11. Ecological Information			
Toxicity Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.			
Product	Species	Test results	
Naphtha (petroleum), heavy naphtha			
Aquatic Algae Crustacea Fish	EC50 Pseudokirchneriella subcapitata EC50 LC50 Pimephales promelas	3,1 mg/l , 72 Hours 4,5 mg/l , 48 Hours 10 mg/l , 96 Hours 8,2 mg/l , 96 Hours	
Persistence and degradability	Expected to be inherently biodegradable.		
Bioaccumulative potential	Potential to bioaccumulate is low.		
Partition coefficient	Log Pow: 2 – 7		
Mobility in soil	Not available.		
Mobility in general	The product is insoluble in water. It will spread on the water surface while some of the components will eventually sediment in water systems. The volatile components of the product will spread in the atmosphere.		
Other adverse effects	Toxic to aquatic life with long lasting effects. The product contains volatile organic compounds which have a photochemical ozone creation potential. Oil spills are generally hazardous to the environment.		
	12. Disposal Considerations		
Waste treatment methods			
Residual waste	Dispose of in accordance with local regulation	s.	
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.		
EU waste code	13 07 02* 13 07 03* The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.		
Disposal methods/information	Dispose in accordance with all applicable regulations. This material and its container must be disposed of as hazardous waste. Do not discharge into drains, water courses or onto the ground.		

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13. Transportation Information

Component	CAS #	
Component		
Heavy Naphtha	6471-54-4	DOT regulated marine pollutant
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DOT Information Shipping Name: Gasoline UN #: 1268 Hazard Class: 3 Packing Group: II Placard:



## 14. Other Information

This material Safety Data Sheet (SDS) was prepared in accordance with EC No 1272/2008 by Valero Energy Ltd. Valero Energy Ltd. does not assume any liability arising out of product use by others. The information, recommendations, and suggestions presented in this SDS are based upon test results and data believed to be reliable. The end user of the product has the responsibility for evaluating the adequacy of the data under the conditions of use, determining the safety, toxicity and suitability of the product under these conditions, and obtaining additional or clarifying information where uncertainty exists. No guarantee expressed or implied is made as to the effects of such use, the results to be obtained, or the safety and toxicity of the product in any specific application. Furthermore, the information herein is not represented as absolutely complete, since it is not practicable to provide all the scientific and study information in the format of this document, plus additional information may be necessary under exceptional conditions of use, or because of applicable laws or government regulations.

## End of MSDS