

**Heavy Aromatic Distillate (HAD)**

Version 1.12

Revision Date 2024-05-16

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

Product Name : Heavy Aromatic Distillate (HAD)  
Material : 1037387, 1059199, 1059200, 1037388, 1037386

Use : Fuel Blendstock, Solvent

Company : Chevron Phillips Chemical Company LP  
10001 Six Pines Drive  
The Woodlands, TX 77380

**Emergency telephone:****Health:**

866.442.9628 (North America)  
1.832.813.4984 (International)

**Transport:**

CHEMTREC 800.424.9300 or 703.527.3887(int'l)  
Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090  
Mexico CHEMTREC 01-800-681-9531 (24 hours)  
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600  
Argentina: +(54)-1159839431  
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
Austria: VIZ +43 1 406 43 43 (24 hours/day, 7 days/week)  
Belgium: 070 245 245 (24 hours/day, 7 days/week)  
Bulgaria: +359 2 9154 233  
Croatia: +3851 2348 342 (24 hours/day, 7 days/week)  
Cyprus: 1401  
Czech Republic: Toxicological Information Center +420 224 919 293, +420 224 915 402  
Denmark: Danish Poison Center (Gifftlinjen): +45 8212 1212  
Estonia: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
Finland: 0800 147 111 09 471 977 (24 hours/day)  
France: ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week)  
Germany: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
Greece: (0030) 2107793777 (24 hours/day, 7 days/week)  
Hungary: +36-80-201-199 (24 hours/day, 7 days/week)  
Iceland: 543 2222 (24 hours/day, 7 days/week)  
Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

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Italy: POISON CENTER MILAN – Azienda Ospedaliera Niguarda Ca` Grande Tel. +39 02 66101029; POISON CENTER ROME – Policlinico “Agostino Gemelli”, Servizio di tossicologia clinica Tel. +39 06 3054343; POISON CENTER ROME – Ospedale Pediatrico Bambino Gesù Tel. +39 06 68593726; POISON CENTER ROME – Policlinico “Umberto I” Tel. +39 06 4997 8000; POISON CENTER FOGGIA – Azienda Ospedaliera Universitaria Riuniti Tel. +39 0881 732326; POISON CENTER NAPLES – Azienda Ospedaliera “Antonio Cardarelli” Tel. +39 081 7472870; POISON CENTER FLORENCE – Azienda Ospedaliera universitaria Careggi Tel. +39 055 7947819; POISON CENTER PAVIA – IRCCS Fondazione Salvatore Maugeri Tel. +39 0382 24444; POISON CENTER BERGAMO – Azienda Ospedaliera “Papa Giovanni XXIII” Tel. 800 883 300; POISON CENTER VERONA – Azienda Ospedaliera Universitaria integrata Tel. 800 011 858;

Latvia: State Fire and Rescue Service, phone number: 112; Toxicology and Sepsis Clinic Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371 67042473. (24 hours.)

Liechtenstein: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Lithuania: +370 (85) 2362052

Luxembourg: (+352) 8002 5500 (24 hours/day, 7 days/week)

Malta: +356 2395 2000

The Netherlands: NVIC: +31 (0)88 755 8000

Norway: 22 59 13 00 (24 hours/day, 7 days/week)

Poland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Portugal: CIAV phone number: +351 800 250 250

Romania: +40213183606

Slovakia: +421 2 5477 4166

Slovenia: Phone number: 112

Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24 hours/day, 7 days/week)

Sweden: 112 – ask for Poisons Information

Responsible Department : Product Safety and Toxicology Group  
 E-mail address : SDS@CPChem.com  
 Website : www.CPChem.com

**SECTION 2: Hazards identification****Classification of the substance or mixture**

This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

**Classification**

: Flammable liquids, Category 3  
 Acute toxicity, Category 3, Inhalation  
 Skin irritation, Category 2  
 Carcinogenicity, Category 2  
 Reproductive toxicity, Category 2  
 Specific target organ toxicity - single exposure, Category 3,  
 Respiratory system, Central nervous system  
 Specific target organ toxicity - repeated exposure, Category 2,  
 Inhalation, Auditory organs, color vision  
 Aspiration hazard, Category 1

**Labeling**

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Symbol(s)

:



Signal Word

:

Danger

Hazard Statements

:

H226: Flammable liquid and vapor.  
 H304: May be fatal if swallowed and enters airways.  
 H315: Causes skin irritation.  
 H331: Toxic if inhaled.  
 H335: May cause respiratory irritation.  
 H336: May cause drowsiness or dizziness.  
 H351: Suspected of causing cancer.  
 H361d: Suspected of damaging the unborn child.  
 H373: May cause damage to organs (Auditory organs, color vision) through prolonged or repeated exposure if inhaled.

Precautionary Statements

:

**Prevention:**

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/ vapors/ spray.  
 P264 Wash skin thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
 P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.  
 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.  
 P362 Take off contaminated clothing and wash before reuse.  
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
 P403 + P235 Store in a well-ventilated place. Keep cool.  
 P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

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**Carcinogenicity:**

<b>IARC</b>	Group 2B: Possibly carcinogenic to humans
	Ethylbenzene 100-41-4
	Cumene 98-82-8
	Naphthalene 91-20-3
<b>NTP</b>	Reasonably anticipated to be a human carcinogen
	Cumene 98-82-8
	Naphthalene 91-20-3

**SECTION 3: Composition/information on ingredients**

Synonyms	: HAD Steam Cracked Distillates (Petroleum) Heavy Aromatic Distillate Gas Blend Petroleum Distillates
Molecular formula	: UVCB

Component	CAS-No.	Weight %
Hydrocarbons, C9-14, ethylene-manuf.-by-product	68514-34-1	100
Ethylbenzene	100-41-4	0 - 30
2,3-Dihydro-1H-Indene	496-11-7	0 - 30
Exo-Tetrahydrodicyclopentadiene	2825-82-3	0 - 30
Endo-tricyclodecane	2825-83-4	0 - 30
Xylenes	1330-20-7	0 - 10
Cumene	98-82-8	0 - 5
Ethyltoluene	25550-14-5	0 - 5
Toluene	108-88-3	0 - 5
Naphthalene	91-20-3	0 - 1
1-Methylnaphthalene	90-12-0	0 - 1
2-Methylnaphthalene	91-57-6	0 - 1
1,2,4-Trimethylbenzene	95-63-6	0 - 1
Benzene	71-43-2	0 - 0.01

**SECTION 4: First aid measures**

General advice	: Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.
If inhaled	: Call a physician or poison control center immediately. If unconscious, place in recovery position and seek medical advice.
In case of skin contact	: If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	: Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while

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If swallowed : rinsing. If eye irritation persists, consult a specialist.  
 : Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

**SECTION 5: Firefighting measures**

Flash point : 40.6-57.2°C (105.1-135.0°F)  
 Method: ASTM D-6450 CCFP

Autoignition temperature : 314.44°C (597.99°F)

Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical.

Unsuitable extinguishing media : High volume water jet.

Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

Fire and explosion protection : Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition.

**SECTION 6: Accidental release measures**

Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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**SECTION 7: Handling and storage****Handling**

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition.

**Storage**

Requirements for storage areas and containers : Prevent unauthorized access. No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Use : Fuel Blendstock, Solvent

**SECTION 8: Exposure controls/personal protection****Ingredients with workplace control parameters****US**

Components	Basis	Value	Control parameters	Note
Ethylbenzene	OSHA Z-1	TWA	100 ppm, 435 mg/m3	
	OSHA Z-1-A	TWA	100 ppm, 435 mg/m3	
	OSHA Z-1-A	STEL	125 ppm, 545 mg/m3	
Xylenes	ACGIH	TWA	20 ppm,	A3,
	OSHA Z-1	TWA	100 ppm, 435 mg/m3	
	OSHA Z-1-A	STEL	150 ppm, 655 mg/m3	
	OSHA Z-1-A	TWA	100 ppm, 435 mg/m3	
Toluene	ACGIH	TWA	100 ppm,	A4,
	ACGIH	STEL	150 ppm,	A4,
	ACGIH	TWA	20 ppm,	A4,
	OSHA Z-2	TWA	200 ppm,	
	OSHA Z-2	CEIL	300 ppm,	
Cumene	OSHA Z-2	Peak	500 ppm,	
	OSHA Z-1-A	TWA	100 ppm, 375 mg/m3	
	OSHA Z-1-A	STEL	150 ppm, 560 mg/m3	
	ACGIH	TWA	50 ppm,	
	OSHA Z-1	TWA	50 ppm, 245 mg/m3	X,
Naphthalene	OSHA Z-1-A	TWA	50 ppm, 245 mg/m3	X,
	ACGIH	TWA	10 ppm,	A3, Skin,
	ACGIH	STEL	15 ppm,	hematologic eff, URT irr, eye irr, eye dam, (), A4, Skin,
	OSHA Z-1	TWA	10 ppm, 50 mg/m3	
1-Methylnaphthalene	OSHA Z-1-A	TWA	10 ppm, 50 mg/m3	
	OSHA Z-1-A	STEL	15 ppm, 75 mg/m3	
	ACGIH	TWA	0.5 ppm,	A4, Skin,
	ACGIH	TWA	0.5 ppm,	A4, Skin,
2-Methylnaphthalene	ACGIH	TWA	0.5 ppm,	A4, Skin,
1,2,4-Trimethylbenzene	ACGIH	TWA	25 ppm,	

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	OSHA Z-1-A	TWA	25 ppm, 125 mg/m3
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( )	Adopted values or notations enclosed are those for which changes are proposed in the NIC
A3	Confirmed animal carcinogen with unknown relevance to humans
A4	Not classifiable as a human carcinogen
eye dam	Eye damage
eye irr	Eye irritation
hematologic eff	Hematologic effects
Skin	Danger of cutaneous absorption
URT irr	Upper Respiratory Tract irritation
X	Skin notation

**Immediately Dangerous to Life or Health Concentrations (IDLH)**

Substance name	CAS-No.	Control parameters	Update
Ethylbenzene	100-41-4	Immediately Dangerous to Life or Health Concentration Value 800 parts per million	1995-03-01
Xylenes	1330-20-7	Immediately Dangerous to Life or Health Concentration Value 900 parts per million	2017-09-01
Toluene	108-88-3	Immediately Dangerous to Life or Health Concentration Value 500 parts per million	1995-03-01
Cumene	98-82-8	Immediately Dangerous to Life or Health Concentration Value 900 parts per million	1995-03-01
Naphthalene	91-20-3	Immediately Dangerous to Life or Health Concentration Value 250 parts per million	1995-03-01
Ethylbenzene	100-41-4	Immediately Dangerous to Life or Health Concentration Value 800 parts per million	1995-03-01
Xylenes	1330-20-7	Immediately Dangerous to Life or Health Concentration Value 900 parts per million	2017-09-01
Toluene	108-88-3	Immediately Dangerous to Life or Health Concentration Value 500 parts per million	1995-03-01
Cumene	98-82-8	Immediately Dangerous to Life or Health Concentration Value 900 parts per million	1995-03-01
Naphthalene	91-20-3	Immediately Dangerous to Life or Health Concentration Value 250 parts per million	1995-03-01

**Biological exposure indices****US**

Substance name	CAS-No.	Control parameters	Sampling time	Update
Ethylbenzene	100-41-4	Sum of mandelic acid and phenyl glyoxylic acid: 0.15 g/g creatinine Nonspecific (Urine)	End of shift (As soon as possible after exposure ceases)	2016-03-01
Xylenes	1330-20-7	Methylhippuric acids: 1.5 g/g creatinine (Urine)	End of shift (As soon as possible after exposure ceases)	2013-03-01
Toluene	108-88-3	Toluene: 0.02 mg/l (In blood)	Prior to last shift of workweek	2010-03-01
		Toluene: 0.03 mg/l (Urine)	End of shift (As soon as possible after exposure ceases)	2010-03-01
		o-Cresol: 0.3 mg/g Creatinine Background (Urine) With hydrolyses ( )	End of shift (As soon as possible after exposure ceases)	2010-03-01

**Engineering measures**

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits.

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Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Personal protective equipment**

- Respiratory protection** : If ventilation or other engineering controls are not adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure, a supplied-air NIOSH approved respirator may be appropriate. If exposure to harmful levels of airborne material may occur, a NIOSH approved respirator that provides protection may be appropriate, such as: Full-Face Supplied-Air Respirator. A positive pressure, air-supplying respirator may be appropriate if there is potential for uncontrolled release, aerosolization, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.
- Hand protection** : The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Eye protection** : Eye wash bottle with pure water.
- Skin and body protection** : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Footwear protecting against chemicals.
- Hygiene measures** : Avoid contact with skin, eyes and clothing. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties****Appearance**

- Physical state : liquid  
 Color : Colorless  
 Odor : Aromatic

**Safety data**

- Flash point : 40.6-57.2°C (105.1-135.0°F)  
 Method: ASTM D-6450 CCFP
- Lower explosion limit : 1 %(V)
- Upper explosion limit : 7.2 %(V)



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Oxidizing properties	: No
Autoignition temperature	: 314.44°C (597.99°F)
Thermal decomposition	: No data available
Molecular formula	: UVCB
Molecular weight	: Not applicable
pH	: Not applicable
Freezing point	: -56.6°C (-69.9°F)
Boiling point/boiling range	: 132°C (270°F)
Vapor pressure	: 0.20 - 0.95 PSI at 38°C (100°F) Method: Reid
Relative density	: 0.92 at 15.6 °C (60.1 °F)
Density	: 922.7 g/l
Water solubility	: Soluble in hydrocarbon solvents; insoluble in water.
Partition coefficient: n-octanol/water	: No data available
Viscosity, kinematic	: < 1 cSt at 37.8°C (100.0°F)
Relative vapor density	: 5.1 (Air = 1.0)
Evaporation rate	: 5.4

**SECTION 10: Stability and reactivity**

<b>Reactivity</b>	: Stable under recommended storage conditions.
<b>Chemical stability</b>	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
<b>Possibility of hazardous reactions</b>	
<b>Hazardous reactions</b>	: Hazardous reactions: Vapors may form explosive mixture with air.

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- Conditions to avoid** : Heat, flames and sparks.
- Thermal decomposition** : No data available
- Other data** : No decomposition if stored and applied as directed.

**SECTION 11: Toxicological information****Heavy Aromatic Distillate (HAD)**

- Acute oral toxicity** : LD50 Oral: > 6,000 mg/kg  
Species: Rat

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- Acute inhalation toxicity** : LC50: 8.5 mg/l  
Exposure time: 4 h  
Species: Rat  
Test atmosphere: vapor  
Test substance: yes

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- Acute dermal toxicity** : LD50 Dermal: > 2,000 mg/kg  
Species: Rabbit  
Test substance: yes

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- Skin irritation** : irritating

May cause skin irritation in susceptible persons.

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- Eye irritation** : No eye irritation. largely based on animal evidence.  
Vapors may cause irritation to the eyes, respiratory system and the skin.

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- Sensitization** : Did not cause sensitization on laboratory animals.

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- Repeated dose toxicity** : Species: Rat, male and female  
Sex: male and female  
Application Route: Dermal  
Dose: 500 mg/kg, 1500 mg/kg  
Exposure time: 4 weeks

Method: Based on product or component testing, long term repeated exposure may cause damage to the following organs:

Target Organs: Auditory organs, Eyes, Blood

Estimated based on individual component values.

**Genotoxicity in vitro**

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Ethylbenzene	: Test Type: Ames test Result: negative
	Test Type: Unscheduled DNA synthesis assay Result: negative
Xylenes	Test Type: Ames test Result: negative
	Test Type: Mouse lymphoma assay Result: negative
Cumene	Test Type: Ames test Result: negative
	Test Type: Cytogenetic assay Result: negative
	Test Type: HGPRT assay Result: negative
	Test Type: Unscheduled DNA synthesis assay Result: negative
Toluene	Test Type: Ames test Result: negative
	Test Type: Sister Chromatid Exchange Assay Result: negative
	Test Type: Mouse lymphoma assay Result: negative
	Test Type: Cytogenetic assay Result: negative
Naphthalene	Test Type: Ames test Result: negative
	Test Type: Sister Chromatid Exchange Assay Result: negative
	Test Type: Unscheduled DNA synthesis assay Result: negative
Benzene	Test Type: Ames test Result: negative
	Test Type: Cytogenetic assay Result: positive
	Test Type: Mouse lymphoma assay Result: positive
	Test Type: Sister Chromatid Exchange Assay Result: negative

**Genotoxicity in vivo**

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Ethylbenzene : Test Type: Mouse micronucleus assay  
Species: Mouse  
Result: negative

Exo-Tetrahydrodicyclopentadiene Test Type: Sister chromatid exchange  
Result: negative

Xylenes Test Type: Mouse micronucleus assay  
Result: negative

Cumene Test Type: Mouse micronucleus assay  
Result: negative

Toluene Test Type: Cytogenetic assay  
Result: negative

Test Type: Mouse micronucleus assay  
Result: negative

Naphthalene Test Type: Mouse micronucleus assay  
Result: negative

Benzene Test Type: Mouse micronucleus assay  
Result: positive

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**Carcinogenicity** : Method: Estimated based on individual component values.  
Remarks: Suspect cancer hazard

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**Reproductive toxicity** : This information is not available.

**Heavy Aromatic Distillate (HAD)**

**Developmental Toxicity** : This information is not available.

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**Aspiration toxicity** : May be fatal if swallowed and enters airways.  
**Toxicology Assessment**

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**CMR effects** : Carcinogenicity:  
Suspected of causing cancer.  
Mutagenicity:  
This information is not available.  
Teratogenicity:  
Suspected of damaging the unborn child.

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**Further information** : Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

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**SECTION 12: Ecological information****Ecotoxicity effects**

**Toxicity to fish** : Toxic to fish.  
Estimated based on individual component values.

**Toxicity to daphnia and other aquatic invertebrates** : Toxic to aquatic organisms.  
Estimated based on individual component values.

**Toxicity to algae** : Toxic to algae.  
Estimated based on individual component values.

**M-Factor**

(3 $\alpha$ ,4 $\alpha$ ,7 $\alpha$ ,7 $\alpha$ - phenyl)-octahydro-4,7-methano- 1H-indene	: M-Factor (Acute Aquat. Tox.)	1
	M-Factor (Chron. Aquat. Tox.)	1

**Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)**

Ethylbenzene : NOEC: 1 mg/l  
Exposure time: 7 d  
Species: Daphnia pulex (Water flea)  
semi-static test  
Analytical monitoring: yes

Biodegradability : This material is not expected to be readily biodegradable.

Elimination information (persistence and degradability)

Bioaccumulation : This material is not expected to bioaccumulate.

Mobility : No data available

Results of PBT assessment : This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

**Ecotoxicology Assessment**

Short-term (acute) aquatic hazard : Toxic to aquatic life.

Long-term (chronic) aquatic hazard : Toxic to aquatic life with long lasting effects.

**SECTION 13: Disposal considerations**

The information in this SDS pertains only to the product as shipped.

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Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

**Product** : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

**Contaminated packaging** : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

**SECTION 14: Transport information**

**The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).**

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

**US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)**

UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III

**IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)**

UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III, (40.6 - 57.2 °C c.c.), MARINE POLLUTANT, (DISTILLATES (PETROLEUM), HYDROTREATED LIGHT)

**IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)**

UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III

**ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))**

UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS, (DISTILLATES (PETROLEUM), HYDROTREATED LIGHT)

**RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))**

30, UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III, ENVIRONMENTALLY HAZARDOUS, (DISTILLATES (PETROLEUM), HYDROTREATED LIGHT)

**ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)**

UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III, ENVIRONMENTALLY HAZARDOUS, (DISTILLATES (PETROLEUM), HYDROTREATED LIGHT)

**Heavy Aromatic Distillate (HAD)**

Version 1.12

Revision Date 2024-05-16

**Maritime transport in bulk according to IMO instruments****SECTION 15: Regulatory information****National legislation**

**SARA 311/312 Hazards** : Flammable (gases, aerosols, liquids, or solids)  
 Acute toxicity (any route of exposure)  
 Carcinogenicity  
 Reproductive toxicity  
 Specific target organ toxicity (single or repeated exposure)  
 Aspiration hazard  
 Skin corrosion or irritation

**CERCLA Reportable Quantity** : 100 lbs  
 Xylenes  
 100 lbs  
 Toluene  
 1000 lbs  
 Ethylbenzene  
 10 lbs  
 Benzene

**SARA 302 Reportable Quantity** : This material does not contain any components with a SARA 302 RQ.

**SARA 302 Threshold Planning Quantity** : This material does not contain any components with a section 302 EHS TPQ.

**SARA 304 Reportable Quantity** : This material does not contain any components with a section 304 EHS RQ.

**SARA 313 Components** : The following components are subject to reporting levels established by SARA Title III, Section 313:

: Ethylbenzene - 100-41-4  
 Xylenes - 1330-20-7  
 Toluene - 108-88-3  
 Cumene - 98-82-8  
 Naphthalene - 91-20-3  
 1,2,4-Trimethylbenzene - 95-63-6

**Heavy Aromatic Distillate (HAD)**

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**Clean Air Act**

Ozone-Depletion Potential : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

- : Ethylbenzene - 100-41-4
- Xylenes - 1330-20-7
- Toluene - 108-88-3
- Cumene - 98-82-8
- Naphthalene - 91-20-3

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

- : Ethylbenzene - 100-41-4
- Xylenes - 1330-20-7
- Toluene - 108-88-3
- Cumene - 98-82-8
- 1-Methylnaphthalene - 90-12-0
- 2-Methylnaphthalene - 91-57-6

**US State Regulations**

Pennsylvania Right To Know

- : Hydrocarbons, C9-14, ethylene-manuf.-by-product - 68514-34-1
- Ethylbenzene - 100-41-4
- 2,3-Dihydro-1H-Indene - 496-11-7
- (1R,7S)-Tricyclo[5.2.1.0<sup>2,6</sup>]decane -
- Endo-tricyclodecane - 2825-83-4
- Xylenes - 1330-20-7
- Toluene - 108-88-3
- Cumene - 98-82-8
- Ethyltoluene - 25550-14-5
- Naphthalene - 91-20-3
- 1-Methylnaphthalene - 90-12-0
- 1,2,4-Trimethylbenzene - 95-63-6
- Benzene - 71-43-2



**Heavy Aromatic Distillate (HAD)**

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California Prop. 65 Components : WARNING: This product can expose you to chemicals including [listed below], which is [are] known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov/food](http://www.P65Warnings.ca.gov/food).

Ethylbenzene	100-41-4
Cumene	98-82-8
Naphthalene	91-20-3
Benzene	71-43-2

WARNING: This product can expose you to chemicals including [listed below], which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

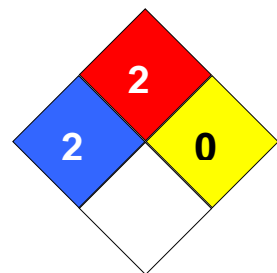
Toluene	108-88-3
Benzene	71-43-2

**Notification status**

Europe REACH	: Not in compliance with the inventory
Switzerland CH INV	: On the inventory, or in compliance with the inventory
United States of America (USA) TSCA	: All substances listed as active on the TSCA inventory
Canada DSL	: This product contains one or several components that are not on the Canadian DSL nor NDSL.
Australia AIC	: On the inventory, or in compliance with the inventory
New Zealand NZIoC	: Not in compliance with the inventory
Japan ENCS	: Not in compliance with the inventory
Philippines PICCS	: Not in compliance with the inventory
Taiwan TCSI	: Not in compliance with the inventory
Korea KECI	: Not in compliance with the inventory
China IECSC	: Not in compliance with the inventory

**SECTION 16: Other information**

**NFPA Classification** : Health Hazard: 2  
Fire Hazard: 2  
Reactivity Hazard: 0

**Further information**

Legacy SDS Number : PE0047

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

**Heavy Aromatic Distillate (HAD)**

Version 1.12

Revision Date 2024-05-16

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AIIC	Australian Inventory of Industrial Chemicals	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%	ATE	Acute toxicity estimate