

# SAFETY DATA SHEET



## Heavy Aromatic Distillate (HAD)

Version 1.10

Revision Date 2020-01-14

### 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  
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
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

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

**Heavy Aromatic Distillate (HAD)**

Version 1.10

Revision Date 2020-01-14

Specific target organ toxicity - repeated exposure, Category 1, Eyes, Blood  
 Specific target organ toxicity - repeated exposure, Category 2, Inhalation, Auditory organs, color vision  
 Aspiration hazard, Category 1

**Labeling**

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.  
 H351: Suspected of causing cancer.  
 H361d: Suspected of damaging the unborn child.  
 H372: Causes damage to organs (Eyes, Blood) through prolonged or repeated exposure.  
 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/vapor/spray.  
 P264 Wash skin thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 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.

**Heavy Aromatic Distillate (HAD)**

Version 1.10

Revision Date 2020-01-14

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.

**Carcinogenicity:****IARC**

Group 2B: Possibly carcinogenic to humans  
 Ethylbenzene 100-41-4  
 Cumene 98-82-8  
 Naphthalene 91-20-3

**NTP**

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

Molecular formula : UVCB

Component	CAS-No.	Weight %
Distillates (petroleum), Hydrotreated light	64742-47-8	100
Ethylbenzene	100-41-4	0 - 30
2,3-Dihydro-1H-Indene	496-11-7	0 - 30
4,7-Methano-1H-indene, octahydro-, (3aR,4S,7R,7aS)-rel-	2825-82-3	0 - 30
Benzene, dimethyl-	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

**Heavy Aromatic Distillate (HAD)**

Version 1.10

Revision Date 2020-01-14

	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 rinsing. If eye irritation persists, consult a specialist.
If swallowed	: 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 (CO2). 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 an open flame or any other 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
----------------------	--

**Heavy Aromatic Distillate (HAD)**

Version 1.10

Revision Date 2020-01-14

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).

**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 an open flame or any other 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
Distillates (petroleum), Hydrotreated light	OSHA Z-1	TWA	500 ppm, 2,000 mg/m <sup>3</sup>	(b),
	OSHA Z-1-A	TWA	400 ppm, 1,600 mg/m <sup>3</sup>	
	ACGIH	TWA	200 mg/m <sup>3</sup>	CNS impair, URT irr, skin irr, P, A3, Skin, varies,
	OSHA Z-1	TWA	5 mg/m <sup>3</sup>	Mist
	OSHA Z-1-A	TWA	5 mg/m <sup>3</sup>	Mist
Ethylbenzene	OSHA Z-1	TWA	100 ppm, 435 mg/m <sup>3</sup>	(b),
	OSHA Z-1-A	TWA	100 ppm, 435 mg/m <sup>3</sup>	
	OSHA Z-1-A	STEL	125 ppm, 545 mg/m <sup>3</sup>	
	ACGIH	TWA	20 ppm,	cochlear imp, kidney dam (nephropathy),

**Heavy Aromatic Distillate (HAD)**

Version 1.10

Revision Date 2020-01-14

Benzene, dimethyl-	OSHA Z-1	TWA	100 ppm, 435 mg/m3	URT irr, BEI, A3, (b),
	OSHA Z-1-A	STEL	150 ppm, 655 mg/m3	
	OSHA Z-1-A	TWA	100 ppm, 435 mg/m3	
	ACGIH	TWA	100 ppm,	CNS impair, URT irr, eye irr, BEI, A4,
	ACGIH	STEL	150 ppm,	CNS impair, URT irr, eye irr, BEI, A4,
Cumene	ACGIH	TWA	50 ppm,	CNS impair, URT irr, eye irr, skin irr, (), X, (b),
	OSHA Z-1	TWA	50 ppm, 245 mg/m3	X, (b),
	OSHA Z-1-A	TWA	50 ppm, 245 mg/m3	X,
Toluene	ACGIH	TWA	20 ppm,	visual impair, female repro, pregnancy loss, BEI, A4,
	OSHA Z-2	TWA	200 ppm,	
	OSHA Z-2	CEIL	300 ppm,	
	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	
Naphthalene	ACGIH	TWA	10 ppm,	hemolytic anemia, URT irr, cataract, A3, Skin, hematologic eff, URT irr, eye irr, eye dam, (), A4, Skin,
	ACGIH	STEL	15 ppm,	
	OSHA Z-1	TWA	10 ppm, 50 mg/m3	(b),
	OSHA Z-1-A	TWA	10 ppm, 50 mg/m3	
	OSHA Z-1-A	STEL	15 ppm, 75 mg/m3	
1-Methylnaphthalene	ACGIH	TWA	0.5 ppm,	LRT irr, lung dam, A4, Skin,
2-Methylnaphthalene	ACGIH	TWA	0.5 ppm,	LRT irr, lung dam, A4, Skin,
1,2,4-Trimethylbenzene	ACGIH	TWA	25 ppm,	CNS impair, hematologic eff, asthma,
	OSHA Z-1-A	TWA	25 ppm, 125 mg/m3	
Benzene	ACGIH	TWA	0.5 ppm,	leukemia, BEI, A1, Skin,
	ACGIH	STEL	2.5 ppm,	leukemia, BEI, A1, Skin,
	OSHA Z-1-A	TWA	1 ppm,	
	OSHA Z-1-A	CEIL	5 ppm,	
	OSHA Z-2	Peak	50 ppm,	(a),
	OSHA 29 CFR 1910.1028(c)	TWA	1 ppm,	
	OSHA 29 CFR 1910.1028(c)	STEL	5 ppm,	
	OSHA CARC	PEL	1 ppm,	
	OSHA CARC	STEL	5 ppm,	

() Adopted values or notations enclosed are those for which changes are proposed in the NIC

(a) This standard applies to the industry segments exempt from the 1 ppm 8-hour TWA and 5 ppm STEL of the benzene standard at 1910.1028.

(b) The value in mg/m3 is approximate.

A1 Confirmed human carcinogen

A3 Confirmed animal carcinogen with unknown relevance to humans

A4 Not classifiable as a human carcinogen

asthma Asthma

BEI Substances for which there is a Biological Exposure Index or Indices (see BEI® section)

cataract Cataract

CNS impair Central Nervous System impairment

cochlear imp Cochlear impair

eye dam Eye damage

eye irr Eye irritation

female repro Female reproductive

hematologic eff Hematologic effects

hemolytic anemia

kidney dam Kidney damage (nephropathy)

(nephropathy)

leukemia Leukemia

LRT irr Lower Respiratory Tract irritation

lung dam Lung damage

P Application restricted to conditions in which there are negligible aerosol exposures

pregnancy loss Pregnancy loss

Skin Danger of cutaneous absorption

skin irr Skin irritation

URT irr Upper Respiratory Tract irritation

varies varies

visual impair Visual impairment

X Skin designation

**Heavy Aromatic Distillate (HAD)**

Version 1.10

Revision Date 2020-01-14

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

Substance name	CAS-No.	Control parameters	Update
Distillates (petroleum), Hydrotreated light	64742-47-8	Immediately Dangerous to Life or Health Concentration Value 2500 mg/m <sup>3</sup>	1995-03-01
Ethylbenzene	100-41-4	Immediately Dangerous to Life or Health Concentration Value 800 parts per million	1995-03-01
Benzene, dimethyl-	1330-20-7	Immediately Dangerous to Life or Health Concentration Value 900 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
Toluene	108-88-3	Immediately Dangerous to Life or Health Concentration Value 500 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
Benzene	71-43-2	Immediately Dangerous to Life or Health Concentration Value 500 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 (Urine)	End of shift (As soon as possible after exposure ceases)	2016-03-01
Benzene, dimethyl-	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 (Urine)	End of shift (As soon as possible after exposure ceases)	2010-03-01

**Engineering measures**

Adequate ventilation to control airborned concentrations below the exposure guidelines/limits. 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 : Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this

**Heavy Aromatic Distillate (HAD)**

Version 1.10

Revision Date 2020-01-14

material if exposure to harmful levels of airborne material may occur, such as: Organic Vapor Cartridges. Full-Face Supplied-Air Respirator. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, 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: Flame retardant antistatic protective clothing. Workers should wear antistatic footwear. Personal protection through wearing a tightly closed chemical protection suit and a self-contained breathing apparatus. 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)

Oxidizing properties : No

Autoignition temperature : 314.44°C (597.99°F)

Thermal decomposition : No data available

Molecular formula : UVCB

Molecular weight : Not applicable

## Heavy Aromatic Distillate (HAD)

Version 1.10

Revision Date 2020-01-14

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

**Chemical stability** : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### Possibility of hazardous reactions

**Hazardous reactions** : Further information: No decomposition if stored and applied as directed.  
Hazardous reactions: Vapors may form explosive mixture with air.

**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

# Heavy Aromatic Distillate (HAD)

Version 1.10

Revision Date 2020-01-14

Species: Rat

**Heavy Aromatic Distillate (HAD)**

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

**Heavy Aromatic Distillate (HAD)**

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

**Heavy Aromatic Distillate (HAD)**

**Skin irritation** : irritating

May cause skin irritation in susceptible persons.

**Heavy Aromatic Distillate (HAD)**

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

**Heavy Aromatic Distillate (HAD)**

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

**Heavy Aromatic Distillate (HAD)**

**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**

Ethylbenzene : Test Type: Ames test  
Result: negative

Test Type: Unscheduled DNA synthesis assay  
Result: negative

Benzene, dimethyl- : Test Type: Ames test  
Result: negative

Test Type: Mouse lymphoma assay  
Result: negative

Cumene : Test Type: Ames test

**Heavy Aromatic Distillate (HAD)**

Version 1.10

Revision Date 2020-01-14

	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**

Ethylbenzene	: Test Type: Mouse micronucleus assay Species: Mouse Result: negative
4,7-Methano-1H-indene, octahydro-, (3aR,4S,7R,7aS)-rel-Benzene, dimethyl-	Test Type: Sister chromatid exchange Result: negative
Cumene	Test Type: Mouse micronucleus assay Result: negative

**Heavy Aromatic Distillate (HAD)**

Version 1.10

Revision Date 2020-01-14

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

**Heavy Aromatic Distillate (HAD)**

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

**Heavy Aromatic Distillate (HAD)**

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

**Heavy Aromatic Distillate (HAD)**

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

**Heavy Aromatic Distillate (HAD)**

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

**Toxicology Assessment****Heavy Aromatic Distillate (HAD)**

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

**Heavy Aromatic Distillate (HAD)**

**Further information** : Solvents may degrease the skin.

**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.

# Heavy Aromatic Distillate (HAD)

Version 1.10

Revision Date 2020-01-14

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

Distillates (petroleum), Hydrotreated light	: NOEC: 0.48 mg/l Exposure time: 21 Days Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211
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.
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.

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**

# Heavy Aromatic Distillate (HAD)

Version 1.10

Revision Date 2020-01-14

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), 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))

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)

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

## SECTION 15: Regulatory information

### National legislation

#### SARA 311/312 Hazards

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

# Heavy Aromatic Distillate (HAD)

Version 1.10

Revision Date 2020-01-14

## EPCRA - EMERGENCY PLANNING COMMUNITY RIGHT - TO – KNOW

CERCLA Reportable Quantity	: 3333 lbs Ethylbenzene 100 lbs Benzene, dimethyl- 10 lbs Benzene 100 lbs Toluene
SARA 302 Reportable Quantity	: This material does not contain any components with a SARA 302 RQ.
SARA 302 Threshold Planning Quantity	: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
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 Benzene, dimethyl- - 1330-20-7 Cumene - 98-82-8 Toluene - 108-88-3 Naphthalene - 91-20-3 1,2,4-Trimethylbenzene - 95-63-6

## 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 12 (40 CFR 61):

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

# Heavy Aromatic Distillate (HAD)

Version 1.10

Revision Date 2020-01-14

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 SOCMi Intermediate or Final VOC's (40 CFR 60.489):

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

## US State Regulations

### Pennsylvania Right To Know

- : Distillates (petroleum), Hydrotreated light - 64742-47-8
- Ethylbenzene - 100-41-4
- 2,3-Dihydro-1H-Indene - 496-11-7
- 4,7-Methano-1H-indene, octahydro-, (3aR,4S,7R,7aS)-rel- - 2825-82-3
- Benzene, dimethyl- - 1330-20-7
- Cumene - 98-82-8
- Ethyltoluene - 25550-14-5
- Toluene - 108-88-3
- Naphthalene - 91-20-3
- 1-Methylnaphthalene - 90-12-0
- 1,2,4-Trimethylbenzene - 95-63-6
- Benzene - 71-43-2

### 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).

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).

Benzene 71-43-2

### Notification status

Europe REACH

: Not in compliance with the inventory

**Heavy Aromatic Distillate (HAD)**

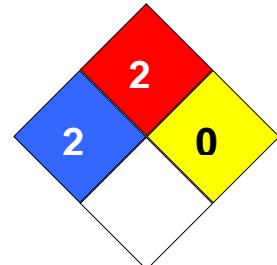
Version 1.10

Revision Date 2020-01-14

Switzerland CH INV	: On the inventory, or in compliance with the inventory
United States of America (USA)	: On or in compliance with the active portion of the TSCA inventory
TSCA	
Canada DSL	: All components of this product are on the Canadian DSL
Australia AICS	: On the inventory, or in compliance with the inventory
New Zealand NZIoC	: On the inventory, or in compliance with the inventory
Japan ENCS	: On the inventory, or in compliance with the inventory
Korea KECI	: A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance.
Philippines PICCS	: On the inventory, or in compliance with the inventory
China IECSC	: On the inventory, or in compliance with the inventory
Taiwan TCSI	: On the inventory, or in compliance with the inventory

**SECTION 16: Other information**

<b>NFPA Classification</b>	: 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.

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%
AICS	Australia, Inventory of Chemical Substances	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

**Heavy Aromatic Distillate (HAD)**

Version 1.10

Revision Date 2020-01-14

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%		