

## 1. Identification

**Product identifier**                      **Crude (Sour)**

**Other means of identification**      None.

**Recommended use**                      Not available.

**Recommended restrictions**          None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer/Supplier**              Devon Energy Production Company, L.P.  
 333 W. Sheridan Avenue  
 Oklahoma City, OK 73102-5010

**Telephone**                                (405) 235-3611

**Emergency**                              CHEMTREC 24 Hour Emergency  
 Within the USA (800) 424-9300  
 Outside the USA +1 703-527-3887

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable liquids	Category 1
<b>Health hazards</b>	Serious eye damage/eye irritation	Category 2A
	Carcinogenicity	Category 1B
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2 (Liver)
	Aspiration hazard	Category 1
<b>Environmental hazards</b>	Hazardous to the aquatic environment, long-term hazard	Category 2
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



**Signal word**                                Danger

**Hazard statement**                      Extremely flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes serious eye irritation. May cause drowsiness or dizziness. May cause cancer. May cause damage to organs (Liver) through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

**Precautionary statement**

**Prevention**                                Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

<b>Response</b>	If swallowed: Immediately call a poison center/doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Do NOT induce vomiting. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media to extinguish. Collect spillage.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Keep cool.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	Static Accumulating Liquid.
<b>Supplemental information</b>	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	CAS number	%
Crude oil	8002-05-9	98 - 100

#### Contains

Chemical name	CAS number	%
Hydrogen sulfide	7783-06-4	>= 0.001
n-Hexane	110-54-3	≥ 5
Xylene (mixed isomers)	1330-20-7	≥ 2
Toluene	108-88-3	≥ 0.6
Benzene	71-43-2	≥ 0.5

### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Skin contact</b>	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>Most important symptoms/effects, acute and delayed</b>	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Jaundice. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.  
**General fire hazards** Extremely flammable liquid and vapor.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up** Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. The product is immiscible with water and will spread on the water surface. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

**Environmental precautions** Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

**Precautions for safe handling** Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Avoid contact with eyes. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Contains	Type	Value
Benzene (CAS 71-43-2)	STEL	5 ppm
	TWA	1 ppm

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Crude oil (CAS 8002-05-9)	PEL	5 mg/m <sup>3</sup>	Mist.
		2000 mg/m <sup>3</sup>	
		500 ppm	

Contains	Type	Value
n-Hexane (CAS 110-54-3)	PEL	1800 mg/m <sup>3</sup>
		500 ppm
Xylene (mixed isomers) (CAS 1330-20-7)	PEL	435 mg/m <sup>3</sup>
		100 ppm

#### US. OSHA Table Z-2 (29 CFR 1910.1000)

Contains	Type	Value
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm
Benzene (CAS 71-43-2)	Ceiling	25 ppm

**US. OSHA Table Z-2 (29 CFR 1910.1000)**

Contains	Type	Value
Hydrogen sulfide (CAS 7783-06-4)	TWA	10 ppm
	Ceiling	20 ppm

**US. ACGIH Threshold Limit Values**

Contains	Type	Value
n-Hexane (CAS 110-54-3)	TWA	50 ppm
Xylene (mixed isomers) (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm
Toluene (CAS 108-88-3)	TWA	20 ppm
Benzene (CAS 71-43-2)	STEL	2.5 ppm
	TWA	0.5 ppm
Hydrogen sulfide (CAS 7783-06-4)	STEL	5 ppm
	TWA	1 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
Crude oil (CAS 8002-05-9)	Ceiling	1800 mg/m3	Mist.
	STEL	10 mg/m3	
	TWA	350 mg/m3	
Contains	Type	Value	
n-Hexane (CAS 110-54-3)	TWA	180 mg/m3	
		50 ppm	
Toluene (CAS 108-88-3)	STEL	560 mg/m3	
	TWA	150 ppm	
Benzene (CAS 71-43-2)		375 mg/m3	
	STEL	100 ppm	
Hydrogen sulfide (CAS 7783-06-4)	TWA	1 ppm	
	Ceiling	0.1 ppm	
		15 mg/m3	
		10 ppm	

**Biological limit values**

**ACGIH**

Contains	Value	Determinant	Specimen	Sampling Time
Benzene (CAS 71-43-2)	500 µg/g	t,t-Muconic acid	Creatinine in urine	*

**ACGIH Biological Exposure Indices**

Contains	Value	Determinant	Specimen	Sampling Time
n-Hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedio n, without hydrolysis	Urine	*
Xylene (mixed isomers) (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
Benzene (CAS 71-43-2)	25 µg/g	S-Phenylmercapturic acid	Creatinine in urine	*

\* - For sampling details, please see the source document.

## Exposure guidelines

### US - California OELs: Skin designation

Benzene (CAS 71-43-2)

Can be absorbed through the skin.

n-Hexane (CAS 110-54-3)

Can be absorbed through the skin.

Toluene (CAS 108-88-3)

Can be absorbed through the skin.

### US - Minnesota Haz Subs: Skin designation applies

Toluene (CAS 108-88-3)

Skin designation applies.

### US ACGIH Threshold Limit Values: Skin designation

Benzene (CAS 71-43-2)

Can be absorbed through the skin.

n-Hexane (CAS 110-54-3)

Can be absorbed through the skin.

### Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Chemical respirator with organic vapor cartridge and full facepiece.

#### Skin protection

##### Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

##### Skin protection

##### Other

Wear suitable protective clothing. Use of an impervious apron is recommended.

#### Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

Liquid.

### Physical state

Liquid.

### Form

Liquid.

### Color

Brown.

### Odor

Hydrocarbon. Rotten eggs. (Hydrogen sulfide odor).

### Odor threshold

Not available.

### pH

Not available.

### Melting point/freezing point

-99 °F (-72.78 °C) estimated

### Initial boiling point and boiling range

85 - 500 °F @ 1 atmosphere

### Flash point

32 - 200 °F

### Evaporation rate

Not available.

### Flammability (solid, gas)

Not applicable.

### Upper/lower flammability or explosive limits

Flammability limit - lower (%) 1.1 % estimated

Flammability limit - upper (%) 5.9 % estimated

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

### Vapor pressure

10 - 50 psi @ 100 °F

### Vapor density

(Air = 1)

### Relative density

0.65 - 1.0 g/cm<sup>3</sup>

<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble (<0.1)
<b>Partition coefficient (n-octanol/water)</b>	1.8 - 8
<b>Auto-ignition temperature</b>	230 - 255 °C
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides. Sulfur oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Jaundice. Prolonged exposure may cause chronic effects.
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### Information on toxicological effects

<b>Acute toxicity</b>	May be fatal if swallowed and enters airways. Narcotic effects.
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<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Crude oil (CAS 8002-05-9)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
<b>Contains</b>		
<b>Species</b>		
<b>Test Results</b>		
Toluene (CAS 108-88-3)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	14.1 ml/kg
<i>Inhalation</i>		
LC50	Rat	49000 mg/m <sup>3</sup> , 4 Hours
<i>Oral</i>		
LD50	Rat	5580 mg/kg

Contains	Species	Test Results
Benzene (CAS 71-43-2)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	930 mg/kg
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	May cause cancer.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Benzene (CAS 71-43-2)	1 Carcinogenic to humans.	
Crude oil (CAS 8002-05-9)	3 Not classifiable as to carcinogenicity to humans.	
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.	
Xylene (mixed isomers) (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.	
<b>NTP Report on Carcinogens</b>		
Benzene (CAS 71-43-2)	Known To Be Human Carcinogen.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>		
Benzene (CAS 71-43-2)	Cancer	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity - single exposure</b>	May cause drowsiness and dizziness.	
<b>Specific target organ toxicity - repeated exposure</b>	May cause damage to organs (Liver) through prolonged or repeated exposure.	
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.	
<b>Chronic effects</b>	May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.	

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
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Crude oil (CAS 8002-05-9)

**Aquatic**

Fish	LC50	Cutthroat trout ( <i>Oncorhynchus clarki</i> )	2.1 - 4.3 mg/l, 96 hours
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**Contains**

Toluene (CAS 108-88-3)

**Aquatic**

*Acute*

Crustacea	EC50	Daphnia magna	11.5 mg/l, 48 hours
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Fish	LC50	Oncorhynchus kisutch	5.5 mg/l, 96 hours
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Benzene (CAS 71-43-2)

**Aquatic**

Crustacea	EC50	Water flea ( <i>Daphnia magna</i> )	8.76 - 15.6 mg/l, 48 hours
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Fish	LC50	Rainbow trout, donaldson trout ( <i>Oncorhynchus mykiss</i> )	5.9 mg/l, 96 hours
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**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Crude (Sour)

930676 Version #: 04 Revision date: 07-December-2016 Issue date: 16-October-2015

SDS US

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### 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

#### US RCRA Hazardous Waste U List: Reference

Benzene (CAS 71-43-2)	U019
Hydrogen sulfide (CAS 7783-06-4)	U135
Toluene (CAS 108-88-3)	U220
Xylene (mixed isomers) (CAS 1330-20-7)	U239

<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

<b>DOT</b>	
<b>UN number</b>	UN1267
<b>UN proper shipping name</b>	Petroleum crude oil
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	3
<b>Packing group</b>	I
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling. Any re-classification or offer for shipment under alternate classification must comply with 49 CFR 173.41 and 173.21
<b>Special provisions</b>	144, 357, T11, TP1, TP8
<b>Packaging exceptions</b>	150
<b>Packaging non bulk</b>	201
<b>Packaging bulk</b>	243
Note: If Crude Oil has a Hydrogen Sulfide concentration in the vapor space over 100 ppm, Devon Energy recommends shipping as UN 3494, Petroleum sour crude oil, flammable, toxic, 3 (6.1), PGI	

<b>IATA</b>	
<b>UN number</b>	UN1267
<b>UN proper shipping name</b>	Petroleum crude oil
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Packing group</b>	I
<b>Environmental hazards</b>	No.
<b>ERG Code</b>	3L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
Note: If Crude Oil has a Hydrogen Sulfide concentration in the vapor space over 100 ppm, Devon Energy recommends shipping as UN 3494, Petroleum sour crude oil, flammable, toxic, 3 (6.1), PGI	

<b>IMDG</b>	
<b>UN number</b>	UN1267
<b>UN proper shipping name</b>	PETROLEUM CRUDE OIL
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Packing group</b>	I
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No.
<b>EmS</b>	F-E, S-E
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.



Note: If Crude Oil has a Hydrogen Sulfide concentration in the vapor space over 100 ppm, Devon Energy recommends shipping as UN 3494, Petroleum sour crude oil, flammable, toxic, 3 (6.1), PGI

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

## 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.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Benzene (CAS 71-43-2)	Cancer Central nervous system Blood Aspiration Skin Eye respiratory tract irritation Flammability
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### CERCLA Hazardous Substance List (40 CFR 302.4)

Benzene (CAS 71-43-2)	LISTED
Crude oil (CAS 8002-05-9)	LISTED
Hydrogen sulfide (CAS 7783-06-4)	LISTED
n-Hexane (CAS 110-54-3)	LISTED
Toluene (CAS 108-88-3)	LISTED
Xylene (mixed isomers) (CAS 1330-20-7)	LISTED

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Hydrogen sulfide	7783-06-4	100	500		

**SARA 311/312 Hazardous chemical** Yes

### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Crude oil	8002-05-9	98 - 100
Benzene	71-43-2	≥ 0.5
n-Hexane	110-54-3	≥ 5
Xylene (mixed isomers)	1330-20-7	≥ 2

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Benzene (CAS 71-43-2)  
Crude oil (CAS 8002-05-9)  
n-Hexane (CAS 110-54-3)  
Toluene (CAS 108-88-3)  
Xylene (mixed isomers) (CAS 1330-20-7)

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Hydrogen sulfide (CAS 7783-06-4)

**Safe Drinking Water Act (SDWA)** Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Toluene (CAS 108-88-3) 6594

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Toluene (CAS 108-88-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number**

Toluene (CAS 108-88-3) 594

**US state regulations** WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Benzene (CAS 71-43-2)

Toluene (CAS 108-88-3)

**US. Massachusetts RTK - Substance List**

Benzene (CAS 71-43-2)

Crude oil (CAS 8002-05-9)

Hydrogen sulfide (CAS 7783-06-4)

n-Hexane (CAS 110-54-3)

Toluene (CAS 108-88-3)

Xylene (mixed isomers) (CAS 1330-20-7)

**US. New Jersey Worker and Community Right-to-Know Act**

Benzene (CAS 71-43-2)

Crude oil (CAS 8002-05-9)

Hydrogen sulfide (CAS 7783-06-4)

n-Hexane (CAS 110-54-3)

Toluene (CAS 108-88-3)

Xylene (mixed isomers) (CAS 1330-20-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Benzene (CAS 71-43-2)

Crude oil (CAS 8002-05-9)

Hydrogen sulfide (CAS 7783-06-4)

n-Hexane (CAS 110-54-3)

Toluene (CAS 108-88-3)

Xylene (mixed isomers) (CAS 1330-20-7)

**US. Rhode Island RTK**

Benzene (CAS 71-43-2)

Crude oil (CAS 8002-05-9)

Hydrogen sulfide (CAS 7783-06-4)

n-Hexane (CAS 110-54-3)

Toluene (CAS 108-88-3)

Xylene (mixed isomers) (CAS 1330-20-7)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 16-October-2015  
**Revision date** 07-December-2016  
**Version #** 04  
**HMIS® ratings** Health: 2\*  
Flammability: 4  
Physical hazard: 0

### NFPA ratings



### Disclaimer

Devon Energy cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.