



# Produced Water With Hydrocarbon

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

**SDS No: 15015**

Date of Issue: 10/26/2018

Version: 1.0

## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** Produced Water With Hydrocarbon

### 1.2. Intended Use of the Product

No use is specified.

### 1.3. Name, Address, and Telephone of the Responsible Party

#### Customer

Hess Tower  
1501 McKinney  
Houston, TX 77010  
T:(713) 496-4000

When calling the main operator ask for the EHS Safety Department. All Hess SDSs are also available via the [Hess.com](http://Hess.com) website.

### 1.4. Emergency Telephone Number

**Emergency Number** : (800) 424-9300 CHEMTREC (24 hours)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### GHS-US/CA Classification

Flam. Liq. 2	H225
Carc. 1B	H350
STOT SE 3	H335

Full text of hazard classes and H-statements : see Section 16.

### 2.2. Label Elements

#### GHS-US/CA Labeling

**Hazard Pictograms (GHS-US/CA)** :



**Signal Word (GHS-US/CA)** :

Danger

**Hazard Statements (GHS-US/CA)** :

H225 - Highly flammable liquid and vapor.  
H335 - May cause respiratory irritation.  
H350 - May cause cancer.

**Precautionary Statements (GHS-US/CA)** :

P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical, ventilating, and lighting equipment.  
P242 - Use only non-sparking tools.  
P243 - Take action to prevent static discharges.  
P261 - Avoid breathing vapors, spray, mist, gas.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves, protective clothing, and eye protection.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

# Produced Water With Hydrocarbon

## Safety Data Sheet SDS No: 15015

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Rinse skin with water.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P312 - Call a POISON CENTER or doctor if you feel unwell.

P370+P378 - In case of fire: Use appropriate media (see Section 5) to extinguish.

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.

P501 - Dispose of contents/container in accordance with local, regional, national, provincial, territorial and international regulations.

### 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions. Produced water with hydrocarbon is contaminated with crude oil at small concentrations.

### 2.4. Unknown Acute Toxicity (GHS-US/CA)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixture

Name	Product Identifier	% *	GHS Ingredient Classification
Water	(CAS-No.) 7732-18-5	74 - 95	Not classified
Sodium chloride	(CAS-No.) 7647-14-5	5 - 26	Not classified
Petroleum	(CAS-No.) 8002-05-9	< 1	Flam. Liq. 1, H224 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Carc. 1B, H350 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Sulfur	(CAS-No.) 7704-34-9	< 1	Skin Irrit. 2, H315 Aquatic Acute 3, H402 Comb. Dust
Xylenes (o-, m-, p- isomers)	(CAS-No.) 1330-20-7	0.001 - 0.07	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:vapor), H332 Skin Irrit. 2, H315 STOT SE 3, H336 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Acute 2, H401
Toluene	(CAS-No.) 108-88-3	0.001 - 0.07	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 3, H412
Ethylbenzene	(CAS-No.) 100-41-4	0.001 - 0.07	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation:vapor), H332 Carc. 2, H351 STOT RE 2, H373

# Produced Water With Hydrocarbon

Safety Data Sheet **SDS No: 15015**

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

			Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 3, H412
Naphthalene	(CAS-No.) 91-20-3	< 0.01	Flam. Sol. 2, H228 Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Comb. Dust
Hydrogen sulfide	(CAS-No.) 7783-06-4	< 0.01	Flam. Gas 1, H220 Press. Gas (Liq.), H280 Acute Tox. 2 (Inhalation:gas), H330 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 1, H400

Full text of H-phrases: see Section 16.

\*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First-aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**General:** May cause respiratory irritation. May cause cancer.

**Inhalation:** Irritation of the respiratory tract and the other mucous membranes.

**WARNING:** irritating and toxic hydrogen sulfide gas may be present. Greater than 15-20 ppm continuous exposure can cause mucous membrane and respiratory tract irritation. 50-500 ppm can cause headache, nausea, and dizziness. Continued exposure at these levels can lead to loss of reasoning and balance, difficulty in breathing, fluid in the lungs, and possible loss of consciousness. Greater than 500 ppm can cause rapid unconsciousness and death if not promptly revived.

**Skin Contact:** Prolonged exposure may cause skin irritation.

**Eye Contact:** May cause slight irritation to eyes.

**Ingestion:** Ingestion may cause adverse effects.

**Chronic Symptoms:** May cause cancer.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>). Water may be ineffective but water should be used to keep fire-exposed container cool.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. A heavy water stream may spread burning liquid.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Highly flammable liquid and vapor.

**Explosion Hazard:** May form flammable or explosive vapor-air mixture.

**Reactivity:** Reacts violently with strong oxidizers. Increased risk of fire or explosion.

# Produced Water With Hydrocarbon

Safety Data Sheet **SDS No: 15015**

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

## 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk. Water spray may be useful in minimizing or dispersing vapors. Cool equipment exposed to fire with water, if it can be done with minimal risk. Small fires in the incipient stage may typically be extinguished using handheld portable fire extinguishers and other firefighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke, or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full face piece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish fire, often including the need for properly applied firefighting foam.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of sulfur and/or nitrogen. Hydrogen sulfide and other sulfur-containing gases can evolve from this product particularly at elevated temperatures.

### Reference to Other Sections

Refer to Section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do not get in eyes, on skin, or on clothing. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges. Do not breathe vapors, spray, mist, gas.

#### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protective equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel. Stop leak if safe to do so.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area. Eliminate ignition sources.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and Materials for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools.

### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** Handle empty containers with care because residual vapors are flammable. If stored under heat for extended periods or significantly agitated, this material might evolve or release hydrogen sulfide, a flammable gas, which can raise and widen this material's actual flammability limits and significantly lower its auto-ignition temperature. Hydrogen sulfide is a toxic gas that can be fatal. It also has a rotten egg smell that causes odor fatigue very quickly and should not be used as an indicator for the presence of gas.

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Take precautionary measures against static discharge. Use only non-sparking tools. Avoid contact with eyes, skin and clothing. Do not handle until all safety precautions have been read and understood. Do not breathe vapors, spray, mist, gas.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

# Produced Water With Hydrocarbon

## Safety Data Sheet **SDS No: 15015**

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

**Technical Measures:** Comply with applicable regulations. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

**Storage Conditions:** Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in a well-ventilated place. Keep container tightly closed. Keep in fireproof place.

**Incompatible Materials:** Strong acids, strong bases, strong oxidizers, water-reactive materials.

**Storage Area:** Hydrogen sulfide vapors may be evolved from long-term heated storage and/or agitated transport. Hydrogen sulfide is corrosive to most metals. It can cause steel pipe to become blistered, pitted, and brittle. Metal components used for storage should be resistant to sulfide stress cracking. (See appropriate API and NACE standards.) Where hydrogen sulfide is routinely stored, install monitoring equipment or system with alarms.

### 7.3. Specific End Use(s)

No use is specified.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in Section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Petroleum (8002-05-9)		
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	2000 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	350 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	1800 mg/m <sup>3</sup> (15 min)
USA IDLH	US IDLH (ppm)	1100 ppm (10% LEL)
Naphthalene (91-20-3)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route, Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA ACGIH	Biological Exposure Indices (BEI)	Parameter: 1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis - Sampling time: end of shift (nonquantitative, nonspecific)
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	10 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	75 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (STEL) (ppm)	15 ppm
USA IDLH	US IDLH (ppm)	250 ppm
Alberta	OEL STEL (mg/m <sup>3</sup> )	79 mg/m <sup>3</sup>
Alberta	OEL STEL (ppm)	15 ppm
Alberta	OEL TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Alberta	OEL TWA (ppm)	10 ppm
British Columbia	OEL STEL (ppm)	15 ppm
British Columbia	OEL TWA (ppm)	10 ppm
Ontario	OEL STEL (ppm)	15 ppm (in force until January 1, 2018)
Ontario	OEL TWA (ppm)	10 ppm
Québec	VECD (mg/m <sup>3</sup> )	79 mg/m <sup>3</sup>
Québec	VECD (ppm)	15 ppm
Québec	VEMP (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Québec	VEMP (ppm)	10 ppm
Xylenes (o-, m-, p- isomers) (1330-20-7)		
USA ACGIH	ACGIH TWA (ppm)	100 ppm

# Produced Water With Hydrocarbon

Safety Data Sheet **SDS No: 15015**

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

<b>USA ACGIH</b>	ACGIH STEL (ppm)	150 ppm
<b>USA ACGIH</b>	ACGIH chemical category	Not Classifiable as a Human Carcinogen
<b>USA ACGIH</b>	Biological Exposure Indices (BEI)	1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift
<b>USA OSHA</b>	OSHA PEL (TWA) (mg/m <sup>3</sup> )	435 mg/m <sup>3</sup>
<b>USA OSHA</b>	OSHA PEL (TWA) (ppm)	100 ppm
<b>Alberta</b>	OEL STEL (mg/m <sup>3</sup> )	651 mg/m <sup>3</sup>
<b>Alberta</b>	OEL STEL (ppm)	150 ppm
<b>Alberta</b>	OEL TWA (mg/m <sup>3</sup> )	434 mg/m <sup>3</sup>
<b>Alberta</b>	OEL TWA (ppm)	100 ppm
<b>British Columbia</b>	OEL STEL (ppm)	150 ppm
<b>British Columbia</b>	OEL TWA (ppm)	100 ppm
<b>Ontario</b>	OEL STEL (ppm)	150 ppm
<b>Ontario</b>	OEL TWA (ppm)	100 ppm
<b>Québec</b>	VECD (mg/m <sup>3</sup> )	651 mg/m <sup>3</sup>
<b>Québec</b>	VECD (ppm)	150 ppm
<b>Québec</b>	VEMP (mg/m <sup>3</sup> )	434 mg/m <sup>3</sup>
<b>Québec</b>	VEMP (ppm)	100 ppm
<b>Toluene (108-88-3)</b>		
<b>USA ACGIH</b>	ACGIH TWA (ppm)	20 ppm
<b>USA ACGIH</b>	ACGIH chemical category	Not Classifiable as a Human Carcinogen
<b>USA ACGIH</b>	Biological Exposure Indices (BEI)	0.02 mg/l Parameter: Toluene - Medium: blood - Sampling time: prior to last shift of workweek 0.03 mg/l Parameter: Toluene - Medium: urine - Sampling time: end of shift 0.3 mg/g Kreatinin Parameter: o-Cresol with hydrolysis - Medium: urine - Sampling time: end of shift (background)
<b>USA OSHA</b>	OSHA PEL (TWA) (ppm)	200 ppm
<b>USA OSHA</b>	OSHA PEL (Ceiling) (ppm)	300 ppm
<b>USA OSHA</b>	Acceptable Maximum Peak Above The Acceptable Ceiling Concentration For An 8-Hr Shift	500 ppm Peak (10 minutes)
<b>USA NIOSH</b>	NIOSH REL (TWA) (mg/m <sup>3</sup> )	375 mg/m <sup>3</sup>
<b>USA NIOSH</b>	NIOSH REL (TWA) (ppm)	100 ppm
<b>USA NIOSH</b>	NIOSH REL (STEL) (mg/m <sup>3</sup> )	560 mg/m <sup>3</sup>
<b>USA NIOSH</b>	NIOSH REL (STEL) (ppm)	150 ppm
<b>USA IDLH</b>	US IDLH (ppm)	500 ppm
<b>Alberta</b>	OEL TWA (mg/m <sup>3</sup> )	188 mg/m <sup>3</sup>
<b>Alberta</b>	OEL TWA (ppm)	50 ppm
<b>British Columbia</b>	OEL TWA (ppm)	20 ppm
<b>Ontario</b>	OEL TWA (ppm)	20 ppm
<b>Québec</b>	VEMP (mg/m <sup>3</sup> )	188 mg/m <sup>3</sup>
<b>Québec</b>	VEMP (ppm)	50 ppm
<b>Ethylbenzene (100-41-4)</b>		
<b>USA ACGIH</b>	ACGIH TWA (ppm)	20 ppm
<b>USA ACGIH</b>	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
<b>USA ACGIH</b>	Biological Exposure Indices (BEI)	0.15 g/g Kreatinin Parameter: Sum of mandelic acid and phenylglyoxylic acid - Medium: urine - Sampling time: end of shift (nonspecific)
<b>USA OSHA</b>	OSHA PEL (TWA) (mg/m <sup>3</sup> )	435 mg/m <sup>3</sup>
<b>USA OSHA</b>	OSHA PEL (TWA) (ppm)	100 ppm

# Produced Water With Hydrocarbon

Safety Data Sheet **SDS No: 15015**

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	435 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	545 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (STEL) (ppm)	125 ppm
USA IDLH	US IDLH (ppm)	800 ppm (10% LEL)
Alberta	OEL STEL (mg/m <sup>3</sup> )	543 mg/m <sup>3</sup>
Alberta	OEL STEL (ppm)	125 ppm
Alberta	OEL TWA (mg/m <sup>3</sup> )	434 mg/m <sup>3</sup>
Alberta	OEL TWA (ppm)	100 ppm
British Columbia	OEL TWA (ppm)	20 ppm
Ontario	OEL TWA (ppm)	20 ppm
Québec	VECD (mg/m <sup>3</sup> )	543 mg/m <sup>3</sup>
Québec	VECD (ppm)	125 ppm
Québec	VEMP (mg/m <sup>3</sup> )	434 mg/m <sup>3</sup>
Québec	VEMP (ppm)	100 ppm
<b>Hydrogen sulfide (7783-06-4)</b>		
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH STEL (ppm)	5 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	20 ppm
USA OSHA	Acceptable Maximum Peak Above The Acceptable Ceiling Concentration For An 8-Hr Shift	50 ppm Peak (10 minutes once, only if no other measurable exposure occurs)
USA NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (ceiling) (ppm)	10 ppm
USA IDLH	US IDLH (ppm)	100 ppm
Alberta	OEL Ceiling (mg/m <sup>3</sup> )	21 mg/m <sup>3</sup>
Alberta	OEL Ceiling (ppm)	15 ppm
Alberta	OEL TWA (mg/m <sup>3</sup> )	14 mg/m <sup>3</sup>
Alberta	OEL TWA (ppm)	10 ppm
British Columbia	OEL Ceiling (ppm)	10 ppm
Ontario	OEL STEL (ppm)	15 ppm
Ontario	OEL TWA (ppm)	10 ppm
Québec	VECD (mg/m <sup>3</sup> )	21 mg/m <sup>3</sup>
Québec	VECD (ppm)	15 ppm
Québec	VEMP (mg/m <sup>3</sup> )	14 mg/m <sup>3</sup>
Québec	VEMP (ppm)	10 ppm
<b>Sulfur (7704-34-9)</b>		
Alberta	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

## 8.2. Exposure Controls

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.

**Personal Protective Equipment:** Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

**Hand Protection:** Wear protective gloves.

**Eye and Face Protection:** Chemical safety goggles.

# Produced Water With Hydrocarbon

Safety Data Sheet **SDS No: 15015**

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** Whenever workplace conditions warrant the use of a respirator, a respiratory protection program should be followed that meets or exceeds OSHA 29 CFR 1910.134 and ANSI Z.88.2. Only respirators approved by NIOSH should be selected for use. Protection provided by air-purifying respirators is limited. API recommends the uses of a SCBA or positive pressure/ pressure demand respirator for atmospheric that exceed 10 PPM H<sub>2</sub>S or 2 PPM SO<sub>2</sub>, see API RP 55. Crude oil vapors can displace air causing an oxygen deficient atmosphere. Entry into an oxygen deficient environment can only be made using: 1) a full face piece pressure demand self-contained breathing apparatus (SCBA) with a minimum service life of thirty minutes, or 2) a combination full face piece pressure demand supplied-air respirator with an auxiliary self-contained air supply. A level of H<sub>2</sub>S gas at or above 100 ppm is Immediately Dangerous to Life and Health (IDLH). Entry into IDLH atmospheres can only be made using: 1) a full face piece pressure demand self-contained breathing apparatus (SCBA) with a minimum service life of thirty minutes, or 2) a combination full face piece pressure demand supplied-air respirator with an auxiliary self-contained air supply. Entry into IDLH atmospheres require the use of the Buddy System, see OSHA 1910.120.

**Other Information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Discolored, Slightly Oily Water
Odor	: May Have Hydrocarbon Odor; Hydrogen Sulfide has a Rotten Egg Odor
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: > 260 °C (> 500 °F)
Flash Point	: < (23 - 93) °C < (73.4 - 199.4) °F)
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not determined
Relative Vapor Density at 20°C	: Hydrocarbons Vapors Generally > 1
Relative Density	: Not available
Specific Gravity	: 1 (Water = 1)
Solubility	: Water: Not determined (Hydrocarbons Low)
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
VOC content	: 100 %

## SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Reacts violently with strong oxidizers. Increased risk of fire or explosion.
- 10.2. Chemical Stability:** Highly flammable liquid and vapor. May form flammable or explosive vapor-air mixture.
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.
- 10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers, water-reactive materials.
- 10.6. Hazardous Decomposition Products:** None expected under normal conditions of use.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects - Product

**Acute Toxicity (Oral):** Not classified

**Acute Toxicity (Dermal):** Not classified

# Produced Water With Hydrocarbon

Safety Data Sheet **SDS No: 15015**

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

**Acute Toxicity (Inhalation):** Not classified

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Not classified

**Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** May cause cancer.

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** May cause respiratory irritation.

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Irritation of the respiratory tract and the other mucous membranes.

**WARNING:** irritating and toxic hydrogen sulfide gas may be present. Greater than 15-20 ppm continuous exposure can cause mucous membrane and respiratory tract irritation. 50-500 ppm can cause headache, nausea, and dizziness. Continued exposure at these levels can lead to loss of reasoning and balance, difficulty in breathing, fluid in the lungs, and possible loss of consciousness. Greater than 500 ppm can cause rapid unconsciousness and death if not promptly revived.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.

**Symptoms/Injuries After Ingestion:** Ingestion may cause adverse effects.

**Chronic Symptoms:** May cause cancer.

## 11.2. Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

<b>Sodium chloride (7647-14-5)</b>	
LD50 Oral Rat	3 g/kg
LD50 Dermal Rabbit	> 10000 mg/kg (Species: New Zealand White)
LC50 Inhalation Rat	> 42 g/m <sup>3</sup> (Exposure time: 1 h)
<b>Petroleum (8002-05-9)</b>	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
<b>Naphthalene (91-20-3)</b>	
LD50 Oral Rat	533 - 710 mg/kg
LC50 Inhalation Rat	> 340 mg/m <sup>3</sup> (Exposure time: 1 h)
<b>Xylenes (o-, m-, p- isomers) (1330-20-7)</b>	
LD50 Oral Rat	> 5000 mg/kg
LC50 Inhalation Rat	27.57 mg/l/4h
ATE US/CA (dermal)	1,100.00 mg/kg body weight
ATE US/CA (vapors)	11.00 mg/l/4h
<b>Toluene (108-88-3)</b>	
LD50 Oral Rat	2600 mg/kg
LD50 Dermal Rabbit	12000 mg/kg
LC50 Inhalation Rat	25.7 mg/l/4h
<b>Ethylbenzene (100-41-4)</b>	
LD50 Oral Rat	3500 mg/kg
LD50 Dermal Rabbit	15400 mg/kg
LC50 Inhalation Rat	17.2 mg/l/4h (Exposure time: 4 h)
<b>Hydrogen sulfide (7783-06-4)</b>	
LC50 Inhalation Rat	444 ppm/4h
<b>Sulfur (7704-34-9)</b>	
LD50 Oral Rat	> 3000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg

# Produced Water With Hydrocarbon

Safety Data Sheet **SDS No: 15015**

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

<b>LC50 Inhalation Rat</b>	> 9.23 mg/l/4h
<b>Petroleum (8002-05-9)</b>	
<b>IARC Group</b>	3
<b>Naphthalene (91-20-3)</b>	
<b>IARC Group</b>	2B
<b>National Toxicology Program (NTP) Status</b>	Reasonably anticipated to be Human Carcinogen.
<b>OSHA Hazard Communication Carcinogen List</b>	In OSHA Hazard Communication Carcinogen list.
<b>Xylenes (o-, m-, p- isomers) (1330-20-7)</b>	
<b>IARC Group</b>	3
<b>Toluene (108-88-3)</b>	
<b>IARC Group</b>	3
<b>Ethylbenzene (100-41-4)</b>	
<b>IARC Group</b>	2B
<b>National Toxicology Program (NTP) Status</b>	Evidence of Carcinogenicity.
<b>OSHA Hazard Communication Carcinogen List</b>	In OSHA Hazard Communication Carcinogen list.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Ecology - General: Not classified.

<b>Sodium chloride (7647-14-5)</b>	
<b>LC50 Fish 1</b>	5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
<b>EC50 Daphnia 1</b>	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>LC50 Fish 2</b>	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
<b>EC50 Daphnia 2</b>	340.7 (340.7 - 469.2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
<b>NOEC Chronic Fish</b>	252 mg/l (Species: Pimephales promelas)
<b>Petroleum (8002-05-9)</b>	
<b>LC50 Fish 1</b>	7.1 mg/l (Species: Pimephales promelas, Exposure time 96 h)
<b>LC50 Other Aquatic Organisms 1</b>	2.7 mg/l LL50 96 hr (Kelp forest mysid shrimp)
<b>EC50 Daphnia 1</b>	6.9 mg/l (Exposure time: 48 h)
<b>Naphthalene (91-20-3)</b>	
<b>LC50 Fish 1</b>	5.74 - 6.44 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
<b>EC50 Daphnia 1</b>	2.16 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>LC50 Fish 2</b>	1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
<b>EC50 Daphnia 2</b>	1.96 mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through])
<b>Xylenes (o-, m-, p- isomers) (1330-20-7)</b>	
<b>LC50 Fish 1</b>	3.3 mg/l
<b>EC50 Daphnia 1</b>	3.82 mg/l (Exposure time: 48 h - Species: water flea)
<b>LC50 Fish 2</b>	2.661 (2.661 - 4.093) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
<b>NOEC Chronic Crustacea</b>	1.17
<b>Toluene (108-88-3)</b>	
<b>LC50 Fish 1</b>	15.22 (15.22 - 19.05) mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
<b>EC50 Daphnia 1</b>	5.46 (5.46 - 9.83) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
<b>LC50 Fish 2</b>	12.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
<b>EC50 Daphnia 2</b>	11.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>NOEC Chronic Fish</b>	1.4 mg/l (Oncorhynchus kisutch)
<b>NOEC Chronic Crustacea</b>	0.74 mg/l (Ceriodaphnia dubia)
<b>Ethylbenzene (100-41-4)</b>	
<b>LC50 Fish 1</b>	11.0 - 18.0 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
<b>EC50 Daphnia 1</b>	1.8 - 2.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)

# Produced Water With Hydrocarbon

Safety Data Sheet **SDS No: 15015**

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

LC50 Fish 2	4.2 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
NOEC Chronic Crustacea	0.956 mg/l
<b>Hydrogen sulfide (7783-06-4)</b>	
LC50 Fish 1	0.0448 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
LC50 Fish 2	0.016 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
<b>Sulfur (7704-34-9)</b>	
LC50 Fish 1	866 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 Daphnia 1	736 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	14 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

## 12.2. Persistence and Degradability

<b>Produced Water With Hydrocarbon</b>	
Persistence and Degradability	Not established.

## 12.3. Bioaccumulative Potential

<b>Produced Water With Hydrocarbon</b>	
Bioaccumulative Potential	Not established.
<b>Sodium chloride (7647-14-5)</b>	
BCF Fish 1	(no bioaccumulation)
<b>Naphthalene (91-20-3)</b>	
BCF Fish 1	30 - 430
Log Pow	3.6
<b>Xylenes (o-, m-, p- isomers) (1330-20-7)</b>	
BCF Fish 1	0.6 (0.6 - 15)
Log Pow	2.77 - 3.15
<b>Toluene (108-88-3)</b>	
Log Pow	2.7
<b>Ethylbenzene (100-41-4)</b>	
BCF Fish 1	15
Log Pow	3.2
<b>Hydrogen sulfide (7783-06-4)</b>	
BCF Fish 1	(no bioaccumulation expected)
Log Pow	0.45 (at 25 °C)

## 12.4. Mobility in Soil

Not available

## 12.5. Other Adverse Effects

**Other Information:** Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Additional Information:** Handle empty containers with care because residual vapors are flammable.

**Ecology - Waste Materials:** Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

- |                                      |                             |
|--------------------------------------|-----------------------------|
| <b>14.1. In Accordance with DOT</b>  | Not regulated for transport |
| <b>14.2. In Accordance with IMDG</b> | Not regulated for transport |
| <b>14.3. In Accordance with IATA</b> | Not regulated for transport |
| <b>14.4. In Accordance with TDG</b>  | Not regulated for transport |

# Produced Water With Hydrocarbon

Safety Data Sheet **SDS No: 15015**

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

## SECTION 15: REGULATORY INFORMATION

### 15.1. US Federal Regulations

<b>Produced Water With Hydrocarbon</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Physical hazard - Flammable (gases, aerosols, liquids, or solids) Health hazard - Carcinogenicity Health hazard - Specific target organ toxicity (single or repeated exposure)
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Sodium chloride (7647-14-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Petroleum (8002-05-9)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Naphthalene (91-20-3)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
<b>CERCLA RQ</b>	100 lb
<b>SARA Section 313 - Emission Reporting</b>	0.1 %
<b>Xylenes (o-, m-, p- isomers) (1330-20-7)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
<b>CERCLA RQ</b>	100 lb
<b>SARA Section 313 - Emission Reporting</b>	1 %
<b>Toluene (108-88-3)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
<b>CERCLA RQ</b>	1000 lb
<b>SARA Section 313 - Emission Reporting</b>	1 %
<b>Ethylbenzene (100-41-4)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
<b>CERCLA RQ</b>	1000 lb
<b>SARA Section 313 - Emission Reporting</b>	0.1 %
<b>Hydrogen sulfide (7783-06-4)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302 Subject to reporting requirements of United States SARA Section 313	
<b>CERCLA RQ</b>	100 lb
<b>SARA Section 302 Threshold Planning Quantity (TPQ)</b>	500 lb
<b>SARA Section 313 - Emission Reporting</b>	1 %
<b>Sulfur (7704-34-9)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### 15.2. US State Regulations

<b>Naphthalene (91-20-3)</b>	
<b>U.S. - California - Proposition 65 - Carcinogens List</b>	WARNING: This product contains chemicals known to the State of California to cause cancer.
<b>Toluene (108-88-3)</b>	
<b>U.S. - California - Proposition 65 - Developmental Toxicity</b>	WARNING: This product contains chemicals known to the State of California to cause birth defects.
<b>Ethylbenzene (100-41-4)</b>	

# Produced Water With Hydrocarbon

Safety Data Sheet **SDS No: 15015**

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

<b>U.S. - California - Proposition 65 - Carcinogens List</b>	<b>WARNING:</b> This product contains chemicals known to the State of California to cause cancer.
--	---

## **Petroleum (8002-05-9)**

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

## **Naphthalene (91-20-3)**

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
U.S. - Pennsylvania - RTK (Right to Know) List

## **Xylenes (o-, m-, p- isomers) (1330-20-7)**

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
U.S. - Pennsylvania - RTK (Right to Know) List

## **Toluene (108-88-3)**

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
U.S. - Pennsylvania - RTK (Right to Know) List

## **Ethylbenzene (100-41-4)**

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
U.S. - Pennsylvania - RTK (Right to Know) List

## **Hydrogen sulfide (7783-06-4)**

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
U.S. - Pennsylvania - RTK (Right to Know) List

## **Sulfur (7704-34-9)**

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

### **15.3. Canadian Regulations**

#### **Water (7732-18-5)**

Listed on the Canadian DSL (Domestic Substances List)

#### **Sodium chloride (7647-14-5)**

Listed on the Canadian DSL (Domestic Substances List)

#### **Petroleum (8002-05-9)**

Listed on the Canadian DSL (Domestic Substances List)

#### **Naphthalene (91-20-3)**

Listed on the Canadian DSL (Domestic Substances List)

#### **Xylenes (o-, m-, p- isomers) (1330-20-7)**

Listed on the Canadian DSL (Domestic Substances List)

#### **Toluene (108-88-3)**

Listed on the Canadian DSL (Domestic Substances List)

#### **Ethylbenzene (100-41-4)**

Listed on the Canadian DSL (Domestic Substances List)

# Produced Water With Hydrocarbon

Safety Data Sheet **SDS No: 15015**

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

## Hydrogen sulfide (7783-06-4)

Listed on the Canadian DSL (Domestic Substances List)

## Sulfur (7704-34-9)

Listed on the Canadian DSL (Domestic Substances List)

### SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Date of Preparation or Latest Revision** : 10/26/2018

**Revision**

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

#### GHS Full Text Phrases:

Acute Tox. 2 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 2
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:vapor)	Acute toxicity (inhalation:vapor) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1B	Carcinogenicity Category 1B
Carc. 2	Carcinogenicity Category 2
Comb. Dust	Combustible Dust
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Gas 1	Flammable gases Category 1
Flam. Liq. 1	Flammable liquids Category 1
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Flam. Sol. 2	Flammable solids Category 2
Press. Gas (Liq.)	Gases under pressure Liquefied gas
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H220	Extremely flammable gas
H224	Extremely flammable liquid and vapor
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H228	Flammable solid
H280	Contains gas under pressure; may explode if heated
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation

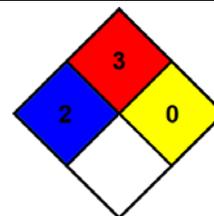
# Produced Water With Hydrocarbon

## Safety Data Sheet **SDS No: 15015**

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

H330	Fatal if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H350	May cause cancer
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

- NFPA Health Hazard** : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA Fire Hazard** : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
- NFPA Reactivity Hazard** : 0 - Material that in themselves are normally stable, even under fire conditions.



*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

NA GHS SDS 2015 (Can, US)