

# UPSHUR COUNTY

SEALED BID

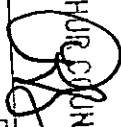
BID DUE DATE:  
JANUARY 28, 2022 @ 4PM

BID FOR:  
GASOLINE AND DIESEL

BID NUMBER/PROJECT:  
UP#01-22

UPSHUR COUNTY JUDGE  
100 W TYLER  
3<sup>RD</sup> FLOOR COUNTY COURTHOUSE  
GILMER, TEXAS 75644

BY:  
SUN COAST RESOURCES, INC.  
C/O NATIONAL SALES AND SUPPLY  
6405 CAVALCADE, BUILDING 1  
HOUSTON, TX 77026  
NATIONAL@SUNCOASTRESOURCES.COM  
713-429-6702 DIRECT

FILED  
TERRI ROSS  
COUNTY CLERK  
2022 JAN 31 AM 11:33  
BY  UP SHUR COUNTY, TX.  
DEPUTY

# CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.  
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

## OFFICE USE ONLY CERTIFICATION OF FILING

Certificate Number:  
2022-840640

Date Filed:  
01/17/2022

Date Acknowledged:

**1 Name of business entity filing form, and the city, state and country of the business entity's place of business.**  
SUN COAST RESOURCES INC.  
HOUSTON, TX United States

**2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.**  
County of Upshur

**3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.**  
UP01-22  
Gasoline and Diesel Fuel

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary
	Lehne, Kathy	Houston, TX United States	X	
	Smith, Lisa	Houston, TX United States	X	
	Lori, Veters	HOUSTON, TX United States	X	

**5 Check only if there is NO Interested Party.**

**6 UNSWORN DECLARATION**

My name is Steven Boyd, and my date of birth is 11/5/1947.

My address is 6405 Cavalcade St, Bldg. 1, Houston, TX, 77026, USA.  
(street) (city) (state) (zip code) (country)

I declare under penalty of perjury that the foregoing is true and correct.

Executed in Harris County, State of Texas, on the 24<sup>th</sup> day of January, 2022.  
(month) (year)

Steven Boyd  
Signature of authorized agent of contracting business entity  
(Declarant)

**CONFLICT OF INTEREST QUESTIONNAIRE**  
For vendor doing business with local governmental entity

**FORM CIQ**

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.  
This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).  
By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.  
A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY
Date Received

**1** Name of vendor who has a business relationship with local governmental entity.  
Sun Coast Resources, Inc.

**2**  Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

**3** Name of local government officer about whom the information is being disclosed.  
N/A  
\_\_\_\_\_  
Name of Officer

**4** Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

Yes       No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

Yes       No

**5** Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

**6**  Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

**7** Steven Boyd      1/24/2022  
Signature of vendor doing business with the governmental entity      Date

**CONFIDENTIAL**

**Bid for Gasoline and Diesel Fuel**

Upshur County is requesting bids for Gasoline and Diesel Fuel as described in the foregoing specifications. Without change in the unit price, it is expressly understood that the total quantity indicated on this bid form is only an estimate.

Having read and understood the attached instructions, specifications, terms and conditions, we submit the following bid:

<u>Quantity</u>	<u>Description</u>	<u>Unit of Measure</u>	<u>Price Per Unit</u>	<u>Total of Items</u>
50,000	Gasoline dock price as of 2:00 p.m. January 18, 2022	GAL	\$ <u>2.7220</u>	
	Profit Margin	GAL	\$ <u>+0.0430</u>	
	Total			\$ <u>138,250.00</u>
70,000	Diesel (ULSD) dock price as of 2:00 p.m. January 18, 2022	GAL	\$ <u>2.6405</u>	
	Profit Margin	GAL	\$ <u>+0.0478</u>	
	Total			\$ <u>188,181.00</u>
TOTAL BID: \$ <u>326,431.00</u>				

Additional profit margin if tanker loads are requested by Upshur County: \$ +0.0900

Margins include freight rate and exclude any applicable taxes and fees.

Margins are based on minimum 7,200 gallons delivered from the Tyler, TX terminal.

Should product not be available at the Tyler, TX terminal, a secondary terminal will be used. Freight will be adjusted to the new rate from the adjusted terminal.

Payment terms are Net 30. 0.00% discount.

The price sheet attached is for the 18<sup>th</sup> @ 2 PM. Monday the 17<sup>th</sup> was a holiday, so they posted a price for the 14<sup>th</sup> at 18:00 and then not again until the 18<sup>th</sup> at 18:00.

The additional profit margin will be added if loads are less than 7,200 gallons.

DELEK REFINING

TYLER- TERMINAL	KERO	AVGSO	JETA	JANOAD	UNL 87	PRE 91
18:00 Change:	0.0000	0.0000	0.0000	0.0000	0.0375	0.0375
01/14/22 Price:	2.53020	3.25772	2.47770	2.43020	2.72200	2.93290

TXLED DIST.	ULS-TXLE	ULSR-TXL
18:00 Change:	0.0225	0.0225
01/14/22 Price:	2.64050	2.64550

TYLER- TERMINAL	87E10	93E10	UNL 87	ULSD DYE 88E15
18:00 Change:	0.0375	0.0375	0.0375	0.0225 0.0375
01/14/22 Price:	2.42980	2.80290	2.72200	2.64550 2.36790

TYLER - BIO DIST	#2UB05CX	#2UB05RX
18:00 Change:	0.0225	0.0225
01/14/22 Price:	2.64050	2.64550

BIG SANDY DIESEL	ULS-TXLE	ULSR-TXL	ULS	ULSR
18:00 Change:	0.0225	0.0225	0.0225	0.0225
01/14/22 Price:	2.95800	2.96300	2.83730	2.09680

BIG SANDY GAS	87E10	93E10
18:00 Change:	0.0375	0.0375
01/14/22 Price:	2.44980	10.5064

CADDO MILLS TX D	ULS-TXLE	ULSR-TXL	ULS	ULSR
18:00 Change:	0.0225	0.0225	0.0225	0.0225
01/14/22 Price:	2.65350	2.65850	10.4495	2.43200

CADDO MILLS TX G	93E10	87E10	RFG87E10	RFG93E10
18:00 Change:	0.0375	0.0375	0.0375	0.0375
01/14/22 Price:	10.9554	2.44290	2.67750	2.89750

MT PLEASANT TX	87E10	93E10	ULS-TXLE	ULSR-TXL	ULS	ULSR
18:00 Change:	0.0375	0.0375	0.0225	0.0225	0.0225	0.0225
01/14/22 Price:	2.46480	2.82990	2.67680	2.68180	2.67680	10.2283

Sun Coast Resources, Inc.	76-0143483
Firm Submitting Bid 6405 Cavalcade St., Building 1	Federal ID Number
Address Houston, TX 77026	
City, State, Zip Houston, TX 77026	
Name and Title of Individual Submitting Bid Steven Boyd, Sr. Managing Director	E-Mail Address national@suncoastresources.com
713-429-6702	713-429-8424
Telephone Number	Fax Number
Signature of Authorized Representative <i>Steven Boyd</i>	

**References:**

List three (3) companies or governmental agencies where these commodities have been provided:

1. Name: Harris County  
Address: 1001 Preston, Ste. 670, Houston, TX 77002 Phone No. 713-274-4424  
Contact person: Melissa McCord Title Senior Buyer
2. Name: Pasadena ISD  
Address: 1515 Cherrybrook Ln, Pasadena, TX 77502 Phone No. 713-740-0817  
Contact person: Andy Castillo Title Shop Supervisor
3. Name: County of Galveston  
Address: 5200 Moody Ave., Galveston, TX 77550 Phone No. 409-770-5403  
Contact person: Rufus Crowder Title Head of Purchasing



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/25/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Krauter & Company, LLC 1330 Lake Robbins Drive, Suite 405 The Woodlands TX 77380	<b>CONTACT NAME:</b>	
	<b>PHONE (A/C, No. Ext):</b>	<b>FAX (A/C, No):</b>
<b>E-MAIL ADDRESS:</b> admin2@krautergroup.com		
<b>INSURER(S) AFFORDING COVERAGE</b>		<b>NAIC #</b>
<b>INSURER A:</b> Lloyd's of London		<b>15792</b>
<b>INSURER B:</b> National Union Fire Ins. Co. of Pittsburgh PA		<b>19445</b>
<b>INSURER C:</b> Ironshore Specialty Insurance Company		<b>25445</b>
<b>INSURER D:</b> AIU Insurance Company		<b>19399</b>
<b>INSURER E:</b>		
<b>INSURER F:</b>		

**INSURED**  
 Sun Coast Resources, Inc.  
 6405 Cavalcade  
 Houston TX 77026

SUNCOAST R

**COVERAGES**

CERTIFICATE NUMBER: 1371745229

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GENL AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	Y	Y	B0621EKSC000121	3/1/2021	3/1/2022	EACH OCCURRENCE \$ 5,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ EXCLUDED PERSONAL & ADV INJURY \$ 5,000,000 GENERAL AGGREGATE \$ 5,000,000 PRODUCTS - COM/OP AGG \$ 5,000,000 \$
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY		Y	4805368	3/1/2021	3/1/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 5,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			B0621EKSC000221	3/1/2021	3/1/2022	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 \$
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		Y	WC 013-755-630	3/1/2021	3/1/2022	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 2,000,000 E.L. DISEASE - EA EMPLOYEE \$ 2,000,000 E.L. DISEASE - POLICY LIMIT \$ 2,000,000
C	Pollution Legal Liability			004330600	3/1/2020	3/1/2023	Each Pollution Event 10,000,000 Aggregate 10,000,000 Ded. Ea. Poli Event 500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
 Waiver of Subrogation is in favor of Upshur County, Texas is included on all policies. Upshur County, Texas is named as additional insured on Auto Liability and General Liability.

**CERTIFICATE HOLDER****CANCELLATION**

Upshur County  
 100 W. Tyler St.  
 3rd Floor County Courthouse  
 P O Box 790  
 Gilmer TX 75644

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2015 ACORD CORPORATION. All rights reserved.



**EXCEPTIONS PAGE**

**UPSHUR COUNTY, TEXAS**

**Bid # UP01-22**

**Gasoline and Diesel Fuel**

Sun Coast Resources, Inc.'s bid is provided subject to the following exceptions:

**General Conditions**

1. Page 7 – Hold Harmless Agreement: Because Bidder does not agree to be liable for the negligence of the County or third parties, Bidder requests that this provision be edited to read as follows:

“The successful bidder shall indemnify and hold Upshur County harmless from all claims for personal injury, death and/or property damage to the extent resulting directly or indirectly from contractor's performance. Notwithstanding anything to the contrary, Bidder shall not be liable for the negligence or more culpable conduct of the County or any third parties. Bidder shall procure and maintain, with respect to the subject matter of this bid, appropriate insurance coverage. Certification of such coverage must be provided to the County upon request.”

**Instructions/Terms of Contract**

2. Page 10 – Insurance Requirements (Commercial General Liability): Because the products made the basis of this bid are perishable, volatile, consumable, have a shelf life, and are of a nature that the County's proper storage, handling, and/or use may determine their quality or ability to meet specifications following delivery, and the fact that the fuel will be used/burned within a short time of delivery (making such term inapplicable), Bidder requests that the following sentence be deleted from the Insurance Requirements: “Coverage for products/completed operations must be maintained for at least two (2) years after the products/services work is completed.”

**Specifications**

3. Page 12 – Scope: We have an extensive emergency response department within our company which has been recognized nationally for our work with first responders during all the major storms over the past 10 plus years. Sun Coast also has a contract with the State of Texas to provide fuel to first responders during periods of peril. In the event there is a need for the Emergency Response Program, this would be subject to a separate contract and agreement for Emergency Services. In



the absence of such an agreement, any delivery would be made on a best-efforts basis, in as timely a fashion as reasonably possible. As such, Bidder requests that the second paragraph of the "Scope" section, on page 12, be amended to read as follows:

"Bids must include the brand and specifications of fuel. Delivery of fuel will normally be by the transport load and ~~shall be delivered~~ Bidder shall use best efforts to deliver within twenty-four (24) hours after the order is placed."

4. Page 12 – Post-Terminal Price: Because 1.) the refinery does not provide pricing to Bidder on the refinery's letterhead; 2.) the bid is based on rack price; 3.) Bidder is contractually prohibited from providing OPIS reports to third parties (as are all OPIS subscribers); and 4.) Bidder cannot provide individual contact information for refinery employees, Bidder requests that this section be replaced in its entirety with the following language:

"Bidder shall provide a copy of the rack price (as supplied by the fuel terminal) along with its invoice."

5. Page 13 – Award of Contract: Because Bidder will not be using jobbers for this work, Bidder requests that the following language be deleted in its entirety:

"A copy of the jobber's invoice to the bidder shall be submitted with this bid to verify the present dock or jobber's price. Successful bidder shall submit a copy of the jobber's current dock price with each invoice."

6. Page 13, Proposed New Section – Force Majeure: Bidder requests the following force majeure language be added to the Specifications:

"Notwithstanding anything to the contrary, except for payment obligations, neither Party shall be liable for any delay or inability to carry out any of its obligations hereunder when such delay or inability is due to a Force Majeure event. Force Majeure includes, but is not limited to, any acts of God, fires, hurricanes, floods, wars, terrorism, pandemics, strikes, civil unrest, or any other causes not reasonably within the control of the Party claiming such inability."

# (Material) Safety Data Sheet



## Section 1 - Product and Company Identification

<b>Material Name</b>	▪ <b>Delek Gasolines, All Grades Unleaded</b>
<b>Product Description</b>	▪ Transparent, clear to amber or red liquid with pungent, characteristic gasoline odor.
<b>Synonyms</b>	▪ Automobile Motor Fuels; Finished Gasolines; Gasoline, Mid-grade Unleaded; Gasoline, Premium Unleaded; Gasoline, Regular Unleaded; Motor Gasolines; Petrol; Unleaded Gasolines
<b>Manufacturer</b>	▪ Delek Refining, Ltd. 425 McMurrey Drive Tyler, TX 75702 United States www.delekus.com
<b>Telephone</b>	
<b>General</b>	▪ 903-579-3400
<b>General</b>	▪ 903-579-3502 - Fax
<b><u>Emergency</u></b>	▪ (800) 424-9300 - 24 Hour CHEMTREC - National
<b><u>Emergency</u></b>	▪ (703) 527-3887 - 24 Hour CHEMTREC - International
<b>Preparation Date</b>	▪ 02/09/2011
<b>Last Revision Date</b>	▪ 02/09/2011

## Section 2 - Hazards Identification

### Emergency Overview

#### DANGER

Highly flammable liquid and vapour. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation. May cause genetic defects. May cause cancer via Inhalation. Suspected of damaging fertility or the unborn child. Causes damage to organs -Ear, Nervous System, Central Nervous System (CNS), Peripheral Nervous System (PNS), Brain, Blood and/or Immune System, Anemia, Bone Marrow, Liver, Kidney through prolonged or repeated exposure via Inhalation, Ingestion/Oral, Skin. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

**Prevention** Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. Keep cool. Ground and/or bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use explosion-proof - electrical, ventilating and/or lighting equipment. Keep container tightly closed. Use personal protective equipment as required. Wear protective gloves, clothing -Full Body Suit, and eye/face protection goggles. Do not breathe dust, fume, gas, mist, vapours and/or spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Avoid release to

the environment.

**Response**

In case of fire: Use appropriate media for extinction. IF INHALED: 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. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Specific treatment, see supplemental first aid information. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. IF exposed or concerned: Get medical advice/attention. Collect spillage.

**Storage/Disposal**

Store in a well-ventilated place. Keep cool. Store locked up. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



*Flammable liquid. Irritating to eyes, skin, and mucous membranes. Aspiration hazard if swallowed. Can enter lungs and cause damage. May cause cancer, reproductive and mutagenic effects.*

**Physical Form**

- Liquid

**Color**

- Transparent, clear to amber or red liquid.

**Odor**

- Characteristic gasoline odor

**Flash Point**

- -45.4 F(-43 C)

**UEL**

- 7.6 %

**LEL**

- 1.4 %

**OSHA**

- Flammable Liquid, Flammable/Combustible - Class IB, Toxic, Irritant, Carcinogen

**WHMIS**

- Class B - Flammable and Combustible Materials - Division 2, Class D - Poisonous and Infectious Materials - Division 2 - Subdivision A, Class D - Poisonous and Infectious Materials - Division 2 - Subdivision B



**EU**

- Highly Flammable - F, Dangerous to the Environment - N, Harmful - Xn, Irritant - Xi, Substances Toxic To Reproduction - Category 3 - Repr.Cat.3, Mutagenic Substances - Category 2 - Muta.Cat.2, Carcinogenic Substances - Category 1 - Carc.Cat.1

R11, R52, R53, R48/20/21/22, R65, R67, R38, R45, R46, R62, R63



**GHS**

- Flammable Liquids - Category 2, Acute Hazards to the aquatic environment - Category 1, Chronic Hazards to the aquatic environment - Category 1, Specific Target Organ Toxicity Single Exposure - Category 3, Specific Target Organ Toxicity Repeated Exposure - Category 1, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Germ Cell Mutagenicity - Category 1 A/B, Carcinogenicity - Category 1A, Aspiration - Category 1, Toxic to Reproduction - Category 2

**Route Of Entry**

- Inhalation, Skin, Eye, Ingestion/Oral

**Target Organs**

- Ear/Ototoxin, Nervous System, Central Nervous System (CNS), Peripheral Nervous System (PNS), Brain, Blood and/or Immune System, Anemia, Bone Marrow, Liver/Heptatoxin, Kidney/Nephrotoxin

**Medical Conditions Aggravated by Exposure**

- Gastrointestinal/Digestive/Colon, Eye/Ocular/Blindness, Ear/Ototoxin, Skin/Dermal, Lungs, Nervous System, Central Nervous System (CNS) Peripheral Nervous System (PNS) Brain, Blood and/or Immune System, Anemia, Bone Marrow, Heart/Cardiovascular System, Liver/Heptatoxin, Kidney/Nephrotoxin,

**NFPA:**



**Potential Health Effects**

**Inhalation**

**Acute (Immediate)**

- May cause irritation. High vapor concentrations can produce central nervous system depression.

**Chronic (Delayed)**

- Repeated or prolonged inhalation can degenerate the liver, kidney, and cause hypoplasia of bone marrow. Repeated or prolonged exposure to hexane and cyclohexane may affect the peripheral nervous system with symptoms ranging from paresthesia to paralysis in the case of extreme overexposure. Toluene may also cause sensitization to Epinephrine or other Adrenalin-like agents.

**Skin**

**Acute (Immediate)**

- May cause irritation.

**Chronic (Delayed)**

- Petroleum products are skin defatting agents and can cause dermatitis on prolonged or repeated exposure. Repeated or prolonged exposure may cause damage to peripheral nervous system with symptoms ranging from tingling of the skin to paralysis.

**Eye**

**Acute (Immediate)**

- May cause irritation.

**Chronic (Delayed)**

- No data available.

**Ingestion**

**Acute (Immediate)**

- Aspiration into the lungs may cause chemical pneumonitis. May cause gastrointestinal disturbances including diarrhea, nausea, and vomiting.

**Chronic (Delayed)**

- No data available.

**Mutagenic Effects**

- Repeated and prolonged exposure may cause mutagenic effects.

**Carcinogenic Effects**

- Repeated and prolonged exposure may cause cancer.

<b>Carcinogenic Effects</b>				
	<b>CAS</b>	<b>IARC</b>	<b>NTP</b>	<b>OSHA</b>
Benzene	71-43-2	Group 1-Carcinogenic	Known Human Carcinogen	Specifically Regulated Carcinogen
Styrene	100-42-5	Group 2B-Possible Carcinogen	Not established	Not established
Naphthalene	91-20-3	Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen	Not established
Ethylbenzene	100-41-4	Group 2B-Possible Carcinogen	Evidence of Carcinogenicity	Not established

**Reproductive Effects**

- Repeated and prolonged exposure may affect the reproductive system.

**Other Chronic Effects**

- Humans who were occupationally exposed to concentrations of toluene as low as 100 ppm for long periods of time have experienced hearing deficits. Hearing loss, as demonstrated using behavioral and electrophysiological testing, as well as by observation of structural damage to cochlear hair cells, occurred in experimental animals exposed to toluene. It also appears that toluene exposure and noise may interact to produce hearing deficits.

**Potential Environmental Effects**

- This product, its storage tank bottoms and sludge, and any contaminated soil or water may be hazardous to human, animal, and aquatic life. Volatile components of this product may contribute to smog.

See Section 12 for Ecological Information.

**Section 3 - Composition/Information on Ingredients**

Hazardous Components						
Chemical Name	CAS	% (weight)	UN;EINECS	LD50/LC50	EU Classification & R Phrases	Other
Octane Isomers		5% TO 20%	NDA	NDA	NDA	NDA
Pentanes		5% TO 20%	NDA	NDA	NDA	NDA
Toluene	108-88-3	1% TO 20%	UN1294, 203-625-9	Ingestion/Oral-Rat LD50: =636 mg/kg Inhalation-Rat LC50: =49 g/m <sup>3</sup> /4 Hour(s) Skin-Rabbit LD50: =14100 µL/kg	F; R11 Xi; R38 Xn; R48/20 R65 Repr.Cat.3; R63 R67	NDA
Xylene	1330-20-7	1% TO 18%	UN1307, 215-535-7	Ingestion/Oral-Rat LD50: =4300 mg/kg Inhalation-Rat LC50: =5000 ppm/4 Hour(s) Skin-Rabbit LD50: >1700 mg/kg	R10 Xn; R20/21 Xi; R38	NDA
Heptane Isomers		5% TO 15%	NDA	NDA	NDA	NDA
Hexane isomers		5% TO 15%	NDA	NDA	NDA	NDA
2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	201-142-8	Inhalation-Rat LC50: =280000 mg/m <sup>3</sup> /4 Hour(s)	F+; R12 N; R51 R53 Xn; R65 R66 R67	NDA
Butane	106-97-8	0% TO 10%	UN1011, 203-448-7	Inhalation-Rat LC50: =658 g/m <sup>3</sup> /4 Hour(s)	F+; R12	NDA
Nonane Isomers		0% TO 10%	NDA	NDA	NDA	NDA
Hexane	110-54-3	1% TO 8%	203-777-6	Ingestion/Oral-Rat LD50: =25 g/kg Inhalation-Rat LC50: =48000 ppm/4 Hour(s)	F; R11 Xi; R38 N; R51 R53 Repr.Cat.3; R62 Xn; R65 R48/20 R67	NDA
Benzene, trimethyl-	25551-13-7	1% TO 5%	247-099-9	Ingestion/Oral-Rat LD50: =8970 mg/kg	NDA	NDA
Methylcyclohexane	108-87-2	1% TO 5%	UN2296, 203-624-3	Ingestion/Oral-Rat LD50: >3200 mg/kg Inhalation-Rabbit LC50: =15227 ppm/1 Hour(s)	F; R11 Xi; R38 N; R51 R53 Xn; R65 R67	NDA
Benzene	71-43-2	0% TO 4.9%	UN1114, 200-753-7	Ingestion/Oral-Rat LD50: =930 mg/kg Inhalation-Rat LC50: =10000 ppm/7 Hour(s) Skin-Rabbit LD50: >9400 µL/kg Ingestion/Oral-Rat LD50: =1800 mg/kg	F; R11 Xi; R36/38 Carc.Cat.1; R45 Muta.Cat.2; R46 T; R48/23/24/25 Xn; R65	NDA
1-Methylethylbenzene	98-82-8	0.5% TO 4%	UN1918, 202-704-5	Ingestion/Oral-Rat LD50: =1400 mg/kg Skin-Rabbit LD50: =12300 µL/kg Inhalation-Rat LC50: =8000 ppm	R10 Xi; R37 N; R51 R53 Xn; R65	NDA
Ethylbenzene	100-41-4	0.2% TO 4%	UN1175, 202-849-4	Ingestion/Oral-Rat LD50: =3500 mg/kg Skin-Rabbit LD50: =17800 µL/kg Inhalation-Rat LC50: =55000 mg/m <sup>3</sup> /2 Hour(s) Skin-Rabbit LD50: >5000 mg/kg	F; R11 Xn; R20	NDA

Ethyl toluene	25550-14-5	1% TO 3%	247-093-6	NDA	NDA	NDA
Hexene, All Isomers		1% TO 3%	NDA	NDA	NDA	NDA
Methylcyclopentane	96-37-7	1% TO 3%	UN2298, 202-503-2	NDA	NDA	NDA
Cyclohexane	110-82-7	0% TO 3%	UN1145, 203-806-2	Ingestion/Oral-Rat LD50: =12705 mg/kg	F; R11 Xi; R38 N; R50 R53 Xn; R65 R67	NDA
Cyclopentane	287-92-3	1% TO 2%	UN1146, 206-016-6	Ingestion/Oral-Rat LD50: =11400 mg/kg Inhalation-Rat LC50: =106000 mg/m <sup>3</sup>	F; R11 R52 R53	NDA
Naphthalene	91-20-3	0.1% TO 2%	UN1334, UN2304, 202-049-5	Skin-Rabbit LD50: >20 g/kg	Xn; R22 Carc.Cat.3; R40 N; R50 R53	NDA
Benzene, propyl-	103-65-1	0.5% TO 1.5%	UN2364, 203-132-9	Ingestion/Oral-Rat LD50: =6040 mg/kg Inhalation-Rat LC50: =65000 ppm/2 Hour(s)	R10 Xi; R37 N; R51 R53 Xn; R65	NDA
Indene	95-13-6	0.5% TO 1.5%	202-393-6	Inhalation-Rat LC50: =14000 mg/m <sup>3</sup> /4 Hour(s)	NDA	NDA
Styrene	100-42-5	0% TO 1%	UN2055, 202-851-5	Ingestion/Oral-Rat LD50: =2650 mg/kg Inhalation-Rat LC50: =2770 ppm/4 Hour(s)	R10 Xn; R20 Xi; R36/38	NDA

Under United States Regulations (29 CFR 1900.1200 - Hazard Communication Standard), this product is considered hazardous. In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS). This product is considered dangerous according to the European Directive 67/548/EEC. According to the Globally Harmonized Standard for Classification and Labeling (GHS) this product is considered hazardous.

See Section 11 for Toxicological Information.

#### Section 4 - First Aid Measures

##### Inhalation

- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Seek medical attention.

##### Skin

- IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. For minor skin contact, avoid spreading material on unaffected skin. If skin irritation occurs: Get medical advice/attention.

##### Eye

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

##### Ingestion

- Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If person is drowsy or unconscious and vomiting, place on the left side with the head down. Seek medical attention.

See Section 2 for Potential Health Effects.

#### Section 5 - Fire Fighting Measures

##### Extinguishing Media

- LARGE FIRE: Water spray, fog or regular foam.  
SMALL FIRES: Dry chemical, CO<sub>2</sub>, water spray, inert gas, or regular foam.

##### Unsuitable Extinguishing Media

- No data available.

##### Firefighting Procedures

- Move containers from fire area if you can do it without risk.  
FIRE: If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.  
LARGE FIRES: Dike fire control water for later disposal; do not scatter the material.  
FIRE INVOLVING TANKS AND CAR/TRAILER LOADS: Fight fire from maximum

distance or use unmanned hose holders or monitor nozzles.  
 FIRES INVOLVING TANKS OR CAR/TRAILER LOADS: Cool containers with flooding quantities of water until well after fire is out.  
 FIRES INVOLVING TANKS OR CAR/TRAILER LOADS: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.  
 FIRES INVOLVING TANKS OR CAR/TRAILER LOADS: ALWAYS stay away from tanks engulfed in fire.  
 FIRES INVOLVING TANKS OR CAR/TRAILER LOADS: For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

- Unusual Fire and Explosion Hazards**
  - HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Containers may explode when heated. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapors may form explosive mixtures with air. Vapor explosion hazard indoors, outdoors or in sewers. Vapors may travel to source of ignition and flash back.
- Hazardous Combustion Products**
  - Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons, aldehydes and other products of incomplete combustion.
- Protection of Firefighters**
  - Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible. Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Flash Point**
  - -45.4 F(-43 C) TCC (Tagliabue Closed Cup)
- Explosion Limits**
  - Upper**
    - 7.6
  - Lower**
    - 1.4
- Autoignition Temperature**
  - 536 F(280 C)

See Section 8 (Exposure Controls/Personal Protection)

## Section 6 - Accidental Release Measures

- Personal Precautions**
  - Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Emergency Procedures**
  - ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Stop leak if you can do it without risk. Ventilate closed spaces before entering.
- Environmental Precautions**
  - Prevent entry into waterways, sewers, basements or confined areas.
- Containment/Clean-up Measures**
  - Immediate clean-up of spill is recommended. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. LARGE SPILLS: Dike far ahead of liquid spill for later disposal. LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.
- Prohibited Materials**
  - No data available
- General Information**
  - If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (Phone number 800 -424-8802)

## Section 7 - Handling and Storage

- Handling**
  - Empty containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other

sources of ignition. They may explode and cause injury or death. Keep away from heat, sparks, and flame – No Smoking. Bond and ground all equipment when transferring from one vessel to another. Product can accumulate static charge by flow or agitation. Do not enter confined spaces such as tanks or pits without following proper entry procedures.

**Storage**

- Store in a cool/low-temperature, well-ventilated place away from heat and ignition sources. Store only in approved containers. Store locked up. Keep container tightly closed. Containers should be clearly labeled. Protect containers against physical damage. Keep away from incompatible materials. Keep away from fire.

**Special Packaging Materials  
Incompatible Materials or  
Ignition Sources**

- No data available.
- Keep away from ignition sources.

**Section 8 - Exposure Controls/Personal Protection**

**Personal Protective Equipment**

**Pictograms**



**Respiratory**

- Use NIOSH approved respiratory protection (US requirements) Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

**Eye/Face**

- Wear protective eyewear (goggles, face shield, or safety glasses).

**Hands**

- Chemical-resistant, impervious gloves should be when handling this product.

**Skin/Body**

- Avoid skin contact. Wear long-sleeved fire-retardant garments (e.g., Nomex®) while working with flammable and combustible liquids. Additional chemical-resistant protective gear may be required if splashing or spraying conditions exist. This may include an apron, boots and additional facial protection. If product comes in contact with clothing, immediately remove soaked clothing and shower. Promptly remove and discarded contaminated leather goods.

**General Industrial Hygiene  
Considerations**

- Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking, or smoking.

**Engineering  
Measures/Controls**

- Good general ventilation should be used. Ventilation rates should be matched to conditions. 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. Eye wash station and quick-drench shower facility should be available in the work area.



Exposure Limits/Guidelines						
	Result	ACGIH	Canada Ontario	Canada Quebec	Europe	NIOSH
2-Methylbutane (In Liquid form) (78-78-4)	TWAs	600 ppm TWA	Not established	Not established	1000 ppm TWA; 3000 mg/m3 TWA	Not established
Cyclohexane (110-82-7)	TWAs	100 ppm TWA	100 ppm TWAEV	300 ppm TWAEV; 1030 mg/m3 TWAEV	200 ppm TWA; 700 mg/m3 TWA	300 ppm TWA; 1050 mg/m3 TWA
Nonane (111-84-2)	TWAs	200 ppm TWA	200 ppm TWAEV; 1050 mg/m3 TWAEV	200 ppm TWAEV; 1050 mg/m3 TWAEV	Not established	200 ppm TWA; 1050 mg/m3 TWA
Styrène (100-42-5)	STELs	40 ppm STEL	100 ppm STEV	100 ppm STEV; 426 mg/m3 STEV	Not established	100 ppm STEL; 425 mg/m3 STEL
	TWAs	20 ppm TWA	35 ppm TWAEV	50 ppm TWAEV; 213 mg/m3 TWAEV	Not established	50 ppm TWA; 215 mg/m3 TWA
Benzene (71-43-2)	STELs	2.5 ppm STEL	2.5 ppm STEV (applies to workplaces to which the designated substance regulation does not apply); 2.5 ppm STEV (designated substances regulation)	5 ppm STEV; 15.5 mg/m3 STEV	Not established	1 ppm STEL
	TWAs	0.5 ppm TWA	0.5 ppm TWAEV (applies to workplaces to which the designated substance regulation does not apply); 0.5 ppm TWAEV (designated substance regulation)	1 ppm TWAEV; 3 mg/m3 TWAEV	Not established	0.1 ppm TWA
Butane (106-97-8)	TWAs	1000 ppm TWA	800 ppm TWAEV; 1900 mg/m3 TWAEV	800 ppm TWAEV; 1900 mg/m3 TWAEV	Not established	800 ppm TWA; 1900 mg/m3 TWA
Naphthalene (91-20-3)	STELs	15 ppm STEL	15 ppm STEV; 78 mg/m3 STEV	15 ppm STEV; 79 mg/m3 STEV	Not established	15 ppm STEL; 75 mg/m3 STEL
	TWAs	10 ppm TWA	10 ppm TWAEV; 52 mg/m3 TWAEV	10 ppm TWAEV; 52 mg/m3 TWAEV	Not established	10 ppm TWA; 50 mg/m3 TWA
Ethylbenzene (100-41-4)	STELs	125 ppm STEL	125 ppm STEV; 540 mg/m3 STEV	125 ppm STEV; 543 mg/m3 STEV	Not established	125 ppm STEL; 545 mg/m3 STEL
	TWAs	100 ppm TWA	100 ppm TWAEV; 435 mg/m3 TWAEV	100 ppm TWAEV; 434 mg/m3 TWAEV	Not established	100 ppm TWA; 435 mg/m3 TWA
Indene (95-13-6)	TWAs	5 ppm TWA	10 ppm TWAEV; 47 mg/m3 TWAEV	10 ppm TWAEV; 48 mg/m3 TWAEV	Not established	10 ppm TWA; 45 mg/m3 TWA
1-Methylethylbenzene (98-82-8)	TWAs	50 ppm TWA	50 ppm TWAEV; 245 mg/m3 TWAEV	50 ppm TWAEV; 246 mg/m3 TWAEV	Not established	50 ppm TWA; 245 mg/m3 TWA
Toluene (108-88-3)	STELs	Not established	Not established	Not established	100 ppm STEL; 384 mg/m3 STEL	150 ppm STEL; 560 mg/m3 STEL
	TWAs	20 ppm TWA	20 ppm TWAEV	50 ppm TWAEV; 188 mg/m3 TWAEV	50 ppm TWA; 192 mg/m3 TWA	100 ppm TWA; 375 mg/m3 TWA
Hexane (110-54-3)	TWAs	50 ppm TWA	50 ppm TWAEV; 176 mg/m3 TWAEV	50 ppm TWAEV; 176 mg/m3 TWAEV	20 ppm TWA; 72 mg/m3 TWA	50 ppm TWA; 180 mg/m3 TWA

Methylcyclohexane (108-87-2)	TWAs	400 ppm TWA	400 ppm TWAEV; 1600 mg/m3 TWAEV	400 ppm TWAEV; 1610 mg/m3 TWAEV	Not established	400 ppm TWA; 1600 mg/m3 TWA
Cyclopentane (287-92-3)	TWAs	600 ppm TWA	600 ppm TWAEV; 1720 mg/m3 TWAEV	600 ppm TWAEV; 1720 mg/m3 TWAEV	Not established	600 ppm TWA; 1720 mg/m3 TWA
Benzene, trimethyl- (25551-13-7)	TWAs	25 ppm TWA	25 ppm TWAEV; 123 mg/m3 TWAEV	25 ppm TWAEV; 123 mg/m3 TWAEV	Not established	Not established
Xylene (1330-20-7)	STELs	150 ppm STEL	150 ppm STEV; 650 mg/m3 STEV	150 ppm STEV; 651 mg/m3 STEV	Not established	Not established
	TWAs	100 ppm TWA	100 ppm TWAEV; 435 mg/m3 TWAEV	100 ppm TWAEV; 434 mg/m3 TWAEV	Not established	Not established
Octane (111-65-9)	STELs	Not established	375 ppm STEV; 1750 mg/m3 STEV	375 ppm STEV; 1750 mg/m3 STEV	Not established	Not established
	TWAs	300 ppm TWA	300 ppm TWAEV; 1400 mg/m3 TWAEV	300 ppm TWAEV; 1400 mg/m3 TWAEV	Not established	75 ppm TWA; 350 mg/m3 TWA
	Ceilings	Not established	Not established	Not established	Not established	385 ppm Ceiling (15 min); 1800 mg/m3 Ceiling (15 min)
Heptane (142-82-5)	STELs	500 ppm STEL	500 ppm STEV; 2045 mg/m3 STEV	500 ppm STEV; 2050 mg/m3 STEV	Not established	Not established
	TWAs	400 ppm TWA	400 ppm TWAEV; 1635 mg/m3 TWAEV	400 ppm TWAEV; 1640 mg/m3 TWAEV	Not established	85 ppm TWA; 350 mg/m3 TWA
	Ceilings	Not established	Not established	Not established	Not established	440 ppm Ceiling (15 min); 1800 mg/m3 Ceiling (15 min)

Exposure Limits/Guidelines (Con't.)		
	Result	OSHA
Cyclohexane (110-82-7)	TWAs	300 ppm TWA; 1050 mg/m3 TWA
Styrene (100-42-5)	Ceilings	200 ppm Ceiling
	TWAs	100 ppm TWA
Benzene (71-43-2)	Ceilings	25 ppm Ceiling
	STELs	5 ppm STEL (see 29 CFR 1910.1028)
	TWAs	10 ppm TWA (applies to industry segments exempt from the benzene standard at 29 CFR 1910.1028); 1 ppm TWA
Naphthalene (91-20-3)	TWAs	10 ppm TWA; 50 mg/m3 TWA
Ethylbenzene (100-41-4)	TWAs	100 ppm TWA; 435 mg/m3 TWA
1- Methylethylbenzene (98-82-8)	TWAs	50 ppm TWA; 245 mg/m3 TWA
Toluene (108-88-3)	Ceilings	300 ppm Ceiling
	TWAs	200 ppm TWA

Hexane (110-54-3)	TWAs	500 ppm TWA; 1800 mg/m3 TWA
Methylcyclohexane (108-87-2)	TWAs	500 ppm TWA; 2000 mg/m3 TWA
Xylene (1330-20-7)	TWAs	100 ppm TWA; 435 mg/m3 TWA
Octane (111-65-9)	TWAs	500 ppm TWA; 2350 mg/m3 TWA
Heptane (142-82-5)	TWAs	500 ppm TWA; 2000 mg/m3 TWA

## Exposure Control Notations

### Canada Ontario

- 1-Methylethylbenzene (98-82-8): **Skin:** (Absorption through skin, eyes, or mucous membranes)
- Benzene (71-43-2): **Designated Substances:** (0.5 ppm TWAEV; 2.5 ppm STEV)

### Canada Quebec

- Styrene (100-42-5): **Carcinogens:** (C3 carcinogen - effect detected in animals) | **Skin:** (Skin designation)
- Toluene (108-88-3): **Skin:** (Skin designation)
- Benzene (71-43-2): **Carcinogens:** (C1 carcinogen - effect detected in humans)
- Hexane (110-54-3): **Skin:** (Skin designation)

### ACGIH

- Naphthalene (91-20-3): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen) | **Skin:** (Skin - potential significant contribution to overall exposure by the cutaneous route)
- Ethylbenzene (100-41-4): **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans)
- Styrene (100-42-5): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Toluene (108-88-3): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Xylene (1330-20-7): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Benzene (71-43-2): **Carcinogens:** (A1 - Confirmed Human Carcinogen) | **Skin:** (Skin - potential significant contribution to overall exposure by the cutaneous route)
- Hexane (110-54-3): **Skin:** (Skin - potential significant contribution to overall exposure by the cutaneous route)

## Exposure Limits Supplemental

### ACGIH

- Methylcyclohexane (108-87-2): **TLV Basis - Critical Effects:** (CNS impairment; kidney and liver damage; upper respiratory tract irritation)
- Indene (95-13-6): **TLV Basis - Critical Effects:** (liver damage)
- Cyclopentane (287-92-3): **TLV Basis - Critical Effects:** (CNS impairment; eye, skin and upper respiratory tract irritation)
- Octane (111-65-9): **TLV Basis - Critical Effects:** (upper respiratory tract irritation)
- Nonane (111-84-2): **TLV Basis - Critical Effects:** (CNS impairment)
- Naphthalene (91-20-3): **TLV Basis - Critical Effects:** (eye damage; eye and upper respiratory tract irritation; hematologic effects)
- Benzene, trimethyl- (25551-13-7): **TLV Basis - Critical Effects:** (asthma; CNS impairment; hematologic effects)
- 2-Methylbutane (in Liquid form) (78-78-4): **TLV Basis - Critical Effects:** (peripheral neuropathy)
- 1-Methylethylbenzene (98-82-8): **TLV Basis - Critical Effects:** (CNS impairment; eye, skin and upper respiratory tract irritation)
- Cyclohexane (110-82-7): **TLV Basis - Critical Effects:** (CNS impairment)
- Ethylbenzene (100-41-4): **BEIs:** (0.7 g/g creatinine Medium: urine Time: end of shift at end of workweek Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-quantitative); Medium: end-exhaled air Time: not critical Parameter: Ethyl benzene (semi-quantitative)) | **TLV Basis - Critical Effects:** (CNS impairment; eye and upper respiratory tract irritation) | **Notice of Intended Changes (TLVs):** (20 ppm TWA; A3 - confirmed animal carcinogen with unknown relevance to humans; BEI; TLV basis: upper respiratory tract irritation, kidney damage, cochlear impairment)
- Heptane (142-82-5): **TLV Basis - Critical Effects:** (CNS impairment; upper respiratory tract irritation)
- Styrene (100-42-5): **BEIs:** (400 mg/g creatinine Medium: urine Time: end of shift Parameter: Mandelic acid plus phenylglyoxylic acid (nonspecific); 0.2 mg/L Medium: venous blood Time: end of shift Parameter: Styrene (semi-quantitative)) | **TLV Basis - Critical Effects:** (CNS impairment; peripheral neuropathy; upper respiratory tract irritation)
- Toluene (108-88-3): **BEIs:** (0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene; 0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene; 0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)) | **TLV Basis - Critical Effects:** (female reproductive; pregnancy loss; visual impairment)
- Xylene (1330-20-7): **BEIs:** (1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids) | **TLV Basis - Critical Effects:** (CNS impairment; eye and upper respiratory tract irritation)
- Benzene (71-43-2): **BEIs:** (25 µg/g creatinine Medium: urine Time: end of shift Parameter: S-Phenylmercapturic acid (background); 500 µg/g creatinine Medium: urine Time: end of shift Parameter: t,t-Muconic acid (background)) | **TLV Basis - Critical Effects:** (leukemia)

- Butane (106-97-8): TLV Basis - Critical Effects: (cardiac sensitization; CNS impairment)
- Hexane (110-54-3): BEIs: (0.4 mg/L Medium: urine Time: end of shift at end of workweek Parameter: 2,5-Hexanedione without hydrolysis) | TLV Basis - Critical Effects: (CNS impairment; eye irritation; peripheral neuropathy)

**Key to abbreviations**

ACGIH = American Conference of Governmental Industrial Hygiene      STEL = Short Term Exposure Limits are based on 15-minute exposures  
 MSHA = Mine Safety and Health Administration                      STEV = Short Term Exposure Value  
 BEI = Biological Exposure Indices                                      TWAEV = Time-Weighted Average Exposure Value  
 NIOSH = National Institute of Occupational Safety and Health      TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures  
 OSHA = Occupational Safety and Health Administration

**Section 9 - Physical and Chemical Properties**

- Physical Form**                                      • Liquid
- Appearance/Description**                      • Transparent, clear to amber or red liquid with pungent, characteristic gasoline odor.

<b>Color :</b> Transparent, clear to amber or red liquid.		<b>Odor :</b> characteristic gasoline.	
<b>Taste :</b> NDA		<b>Odor Threshold :</b> NDA	
<b>Boiling Point:</b>	100 to 400 F(37.7778 to 204.4444 C)	<b>Vapor Pressure:</b>	220 to 450 mmHg (torr) @ 68.00 F
<b>Melting Point:</b>	NDA	<b>Vapor Density:</b>	3 to 4 Air=1
<b>Specific Gravity:</b>	0.72 to 0.77	<b>Evaporation Rate:</b>	NDA
<b>Density:</b>	6.0084 to 6.4257 lbs/gal	<b>VOC (Wt.):</b>	NDA
<b>Bulk Density:</b>	NDA	<b>VOC (Vol.):</b>	720 to 770 g/L
<b>pH:</b>	NDA	<b>Volatiles (Wt.):</b>	NDA
<b>Water Solubility:</b>	Slightly Soluble	<b>Volatiles (Vol.):</b>	NDA
<b>Solvent Solubility:</b>	NDA	<b>Flash Point:</b>	-45.4 F(-43 C)
<b>Viscosity:</b>	0.35 to 1 Centistoke (cSt, cS) or mm2/sec @ 0.35 Celsius	<b>Flash Point Test Type:</b>	TCC (Tagliabue Closed Cup)
<b>Half-Life:</b>	NDA	<b>UEL:</b>	7.6 %
<b>Octanol/Water Partition coefficient:</b>	NDA	<b>LEL:</b>	1.4 %
<b>Coefficient of water/oil distribution:</b>	NDA	<b>Autoignition:</b>	536 F(280 C)
<b>Bioaccumulation Factor:</b>	NDA	<b>Bioconcentration Factor:</b>	NDA
<b>Biochemical Oxygen Demand BOD/BOD5:</b>	NDA	<b>Chemical Oxygen Demand:</b>	NDA
<b>Persistence:</b>	NDA	<b>Degradation:</b>	NDA

**Section 10 - Stability and Reactivity**

- Stability**    • Stable under normal temperatures and pressures. Vapor can cause flash fire.
- Hazardous Polymerization**                      • Hazardous polymerization will not occur.
- Conditions to Avoid**                              • Sources of ignition. Incompatible materials.
- Incompatible Materials**                          • Strong acids, alkalis, and oxidizers such as liquid chlorine and oxygen. If uninhibited, gasoline will cause rusting of copper and alloys containing copper.
- Hazardous Decomposition Products**                      • Excess heating and/or incomplete combustion may produce smoke, carbon monoxide, carbon dioxide, and other harmful gases or vapors.

**Section 11 - Toxicological Information**

Aspiration hazard if swallowed. Can enter lungs and cause damage. Repeated dose toxicity studies of gasoline, benzene, and toluene have resulted in cancer, reproductive effects, and mutagenic changes in experimental animals and humans.

Component Name	Concentration	CAS	Data
Octane	5% TO 20%	111-65-9	<b>Acute Toxicity:</b> ihl-rat LC50:25260 ppm/4H; ihl-rat LC50:118 gm/m3/4H
Toluene	1% TO 20%	108-88-3	<b>Acute Toxicity:</b> ori-rat LD50:636 mg/kg; ori-hmn LDLo:50 mg/kg; ihl-rat LC50:49 gm/m3/4H; ihl-hmn TCLo:200 ppm; ihl-man TCLo:50 ppm; ihl-rat TCLo:40 ppm/16W-I; ihl-rat TCLo:500 ppm/6H/3D-C; skn-rbt LD50:14100 uL/kg; <b>Irritation:</b> eye-hmn 300 ppm; eye-rbt 2 mg/24H SEV; eye-rbt 870 ug MLD; skn-rbt 20 mg/24H MOD; <b>Mutagen:</b> sce-hmn-ihl 252 ug/L/19Y; cyt-rat-ihl 5400 ug/m3/16W-I; <b>Reproductive:</b> ihl-mus TCLo:200 ppm/7H (7-16D preg); ihl-rbt TCLo:1 gm/m3/24H (7-20D preg); ihl-rat TCLo:800 mg/m3/6H (14-20D preg); ihl-rbt TDLo:100 ppm/6H (6-18D preg)
Xylene	1% TO 18%	1330-20-7	<b>Acute Toxicity:</b> skn-rat TDLo:960 uL/kg/4D-I; <b>Irritation:</b> eye-hmn 200 ppm; <b>Reproductive:</b> ihl-rbt TCLo:1 gm/m3/24H (7-20D preg)
Heptane	5% TO 15%	142-82-5	<b>Acute Toxicity:</b> ori-rat TDLo:260 gm/kg/13W-I; ihl-rat LC50:103 gm/m3/4H; ihl-rat TCLo:4000 ppm/6H/28D-I; ihl-rat TCLo:420 mg/m3/12H/2W-I
2-Methylbutane (In Liquid form)	0% TO 10%	78-78-4	<b>Acute Toxicity:</b> ori-rat TDLo:10 gm/kg/4W-I; ihl-rat LC50:280000 mg/m3/4H; ihl-rat TCLo:270000 mg/m3/2H
Butane	0% TO 10%	106-97-8	<b>Acute Toxicity:</b> ihl-rat LC50:658 gm/m3/4H; ihl-hmn TCLo:280 mg/m3
Nonane	0% TO 10%	111-84-2	<b>Acute Toxicity:</b> ori-rat TDLo:90 gm/kg/90D-I; ihl-rat LC50:3200 ppm/4H; ihl-rat TCLo:1600 ppm/6H/13W-I; skn-rat TDLo:1200 uL/kg/4D-I; <b>Irritation:</b> skn-rat 300 uL/4D open MOD
Hexane	1% TO 8%	110-54-3	<b>Acute Toxicity:</b> ori-rat LD50:25 gm/kg; ori-rat TDLo:40 gm/kg/4W-I; ihl-rat LC50:48000 ppm/4H; ihl-rat TCLo:1 pph/6H/13W-I; <b>Irritation:</b> eye-rbt 10 mg MLD; <b>Mutagen:</b> cyt-rat-scu 7.5 mL/kg/12W-I; <b>Reproductive:</b> ihl-rat TCLo:1000 ppm (6-19D preg); ihl-rat TCLo:5000 ppm (6-19D preg); ihl-rat TCLo:1000 ppm/6H (8-16D preg); <b>Tumorigen/Carcinogen:</b> ihl-rat TCLo:1000 ppm/4H/59W-I
Benzene, trimethyl-	1% TO 5%	25551-13-7	<b>Acute Toxicity:</b> ori-rat LD50:8970 mg/kg; <b>Irritation:</b> skn-rbt 500 mg/24H MOD
Methylcyclohexane	1% TO 5%	108-87-2	<b>Acute Toxicity:</b> ori-rat LD50:>3200 mg/kg; ihl-rat LCLo:82 gm/m3/1H; ihl-rat TCLo:11 gm/m3/6H/5D-I; skn-rbt LD :>86700 mg/kg; <b>Irritation:</b> eye-rbt 100 uL/24H MLD; skn-rbt 500 uL/24H MLD
Benzene	0% TO 4.9%	71-43-2	<b>Acute Toxicity:</b> ihl-hmn LCLo:65 mg/m3/5Y; ihl-hmn LCLo:2 pph/5M; ihl-hmn LCLo:2 pph/2M; <b>Irritation:</b> eye-rbt 2 mg/24H SEV; skn-rat 60 uL/8H open MLD; <b>Mutagen:</b> dnr-hmn-ihl 24.4 ppb/8H; dni-rbt-scu 2 gm/kg; oms-hmn:lym 5 umol/L; msc-hmn:lym 1 gm/L; oms-rbt:bmr 1 mmol/L; <b>Reproductive:</b> ihl-rbt TCLo:500 ppm/7H (6-18D preg); ihl-rat TCLo:50 ppm/24H (7-14D preg); <b>Tumorigen/Carcinogen:</b> ihl-hmn TC :8 ppb/4W-I; ihl-hmn TC :150 ppm/15M/8Y-I; ihl-hmn TCLo:10 ppm/8H/10Y-I
1-Methylethylbenzene	0.5% TO 4%	98-82-8	<b>Acute Toxicity:</b> ori-rat LD50:2.9 gm/kg; ori-rat LD50:1400 mg/kg; ihl-rat LC50:8000 ppm; ihl-rat TCLo:300 ppm/30M; skn-rbt LD50:12300 uL/kg; <b>Irritation:</b> eye-rbt 86 mg MLD; skn-rbt 10 mg/24H open MLD; <b>Mutagen:</b> mmo-sat 100 ug/plate/3H (-S9)
Ethylbenzene	0.2% TO 4%	100-41-4	<b>Acute Toxicity:</b> ori-rbt TDLo:1386 mg/kg/24W-C; ihl-hmn TCLo:10 ppm/4H; <b>Irritation:</b> skn-rbt 15 mg/24H open MLD; <b>Reproductive:</b> ihl-rat TCLo:96 ppm/7H (1-19D preg); <b>Tumorigen/Carcinogen:</b> ihl-rat TCLo:750 ppm/6H/2Y-I
Methylcyclopentane	1% TO 3%	96-37-7	<b>Acute Toxicity:</b> ori-rat TDLo:10 gm/kg/4W-I; ihl-mus LCLo:95 gm/m3; ihl-mus LCLo:95000 mg/m3

Cyclohexane	0% TO 3%	110-82-7	<b>Acute Toxicity:</b> orl-rat LD50:12705 mg/kg; ihl-rat TCLo:300 ppm/6H/2W-I; ihl-rat TCLo:2000 ppm/13W-I; skn-rbt LD >:180 gm/kg; <b>Irritation:</b> skn-rbt 1548 mg/2D-I; <b>Mutagen:</b> dna-esc 10 umol/L
Cyclopentane	1% TO 2%	287-92-3	<b>Acute Toxicity:</b> ocu-rbt TDLo:100 pph; ihl-rat LC50:106000 mg/m3
Naphthalene	0.1% TO 2%	91-20-3	<b>Acute Toxicity:</b> orl-chd LDLo:100 mg/kg; orl-rbt LDLo:3 gm/kg; orl-mus TDLo:158 mg/kg; orl-rat TDLo:500 mg/kg/10D-I; orl-rat TDLo:600 mg/kg/4D-I; orl-rat TDLo:10 gm/kg/10D-I; ihl-hmn TCLo:250 mg/m3; ihl-rat TCLo:10 ppm/6H; skn-rbt LD50:>20 gm/kg; skn-rat LD50:>2500 mg/kg; skn-rbt TDLo:0.03 mL/kg/24H; <b>Irritation:</b> skn-rbt 0.05 mL/24H SEV; <b>Mutagen:</b> slt-dmg-ori 5 mmol/L; mnt-hmn:lym 30 mg/L; <b>Reproductive:</b> orl-mus TDLo:2400 mg/kg (7-14D preg); <b>Tumorigen/Carcinogen:</b> ihl-rat TCLo:10 ppm/6H/105W-I; ihl-rat TCLo:1890 mg/kg/105W-I
Benzene, propyl-	0.5% TO 1.5%	103-65-1	<b>Acute Toxicity:</b> orl-rat LD50:6040 mg/kg; ihl-rat LC50:65000 ppm/2H
Indene	0.5% TO 1.5%	95-13-6	<b>Acute Toxicity:</b> ihl-rat LC50:14000 mg/m3/4H; ihl-rat TCLo:3 mg/m3/24H/15W-C
Styrene	0% TO 1%	100-42-5	<b>Acute Toxicity:</b> orl-rat LD50:2650 mg/kg; ihl-rat LC50:2770 ppm/4H; ihl-hmn LCLo:10000 ppm/30M; ihl-rat TCLo:40000 mg/m3/2H; skn-rat TDLo:26.4 mg/kg; <b>Irritation:</b> eye-rbt 100 mg/24H MOD; <b>Mutagen:</b> cyt-hmn-ihl 7500 ppb/8H/5D-I; <b>Reproductive:</b> orl-rat TDLo:11470 mg/kg (6-15D preg); ihl-rat TCLo:293 ppm/6H (7-21D preg); <b>Tumorigen/Carcinogen:</b> ihl-rat TCLo:100 ppm/4H/5D/1Y-I

**Key to abbreviations**

LD = Lethal Dose  
LC = Lethal Concentration  
TD = Toxic Dose  
TC = Toxic Concentration  
MLD = Mild  
MOD = Moderate  
SEV = Severe

See also Section 2.

Section 12 - Ecological Information			
Component Name	Concentration	CAS	Data
Octane	5% TO 20%	111-65-9	<b>Crustacea:</b> 48 Hour(s) EC50 Water Flea =38 mg/L
Toluene	1% TO 20%	108-88-3	<b>Crustacea:</b> 48 Hour(s) EC50 Crustacea 4.74-6.87 mg/L ; <b>Fish:</b> 96 Hour(s) LC50 Fish 5.89-7.81 mg/L
Heptane	5% TO 15%	142-82-5	<b>Fish:</b> 96 Hour(s) LC50 Fish =375 mg/L
2-Methylbutane (In Liquid form)	0% TO 10%	78-78-4	<b>Fish:</b> 96 Hour(s) LC50 Fish =3.1 mg/L
Hexane	1% TO 8%	110-54-3	<b>Fish:</b> 96 Hour(s) LC50 Fish 2.1-2.98 mg/L
Methylcyclohexane	1% TO 5%	108-87-2	<b>Fish:</b> 96 Hour(s) LC50 Fish =5.8 mg/L
1-Methylethylbenzene	0.5% TO 4%	98-82-8	<b>Crustacea:</b> 48 Hour(s) EC50 Water Flea 7.9-14.1 mg/L ; <b>Fish:</b> 96 Hour(s) LC50 Fish =2.7 mg/L
Cyclohexane	0% TO 3%	110-82-7	<b>Fish:</b> 96 Hour(s) LC50 Fish 3.96-5.18 mg/L [Flow through]; 96 Hour(s) LC50 Fish 23.03-42.07 mg/L [Static]
Naphthalene	0.1% TO 2%	91-20-3	<b>Crustacea:</b> 48 Hour(s) EC50 Water Flea 1.09-3.4 mg/L ; <b>Fish:</b> 96 Hour(s) LC50 Fish 1.3-4.01 mg/L

**Ecological Fate**

- Gasoline contains components that are potentially toxic to freshwater and saltwater ecosystems. It will normally float on water. The lighter components of gasoline will evaporate rapidly. In stagnant or slow-flowing waterways, a hydrocarbon layer can cover a large surface area. As a result, this covering layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway might be enough to cause a fish kill or create an

anaerobic environment. This coating action can also be harmful or fatal to plankton, algae, aquatic life, and water birds.

- Persistence/Degradability**     ▪ No data available.
- Bioaccumulation Potential**   ▪ No data available.
- Mobility in Soil**             ▪ No data available.

This material can be hazardous to human health or the environment. If spilled, this material will normally evaporate rapidly. Hydrocarbon components may contribute to atmospheric smog. The atmospheric half-life of the butane components under photochemical smog conditions are estimated to be between three and seven days. Isopentane, n-pentane, hexane isomers, n-heptane, heptane isomers and iso-octane have estimated half-lives of between two and five days in air when photochemical hydroxyl or nitrate radicals are present. Toluene has a half-life of from three hours to approximately one day. Cyclohexane has a half-life of from six hours to over four days when hydroxyl radicals are present.

### **Section 13 - Disposal Considerations**

- Product**                         ▪ This material, if discarded as produced, would be a RCRA "characteristic" hazardous waste due to the characteristic(s) of ignitability (D001) and benzene (D018). If the material is spilled to soil or water, characteristic testing of the contaminated materials is recommended. Further, this material, once it becomes a waste, is subject to the land disposal restrictions in 40 CFR 268.40 and may require treatment prior to disposal to meet specific standards. Consult state and local regulations to determine whether they are more stringent than the federal requirements.
- Packaging**                    ▪ Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Empty drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner.
- General Information**        ▪ Maximize material recovery for reuse or recycling. If spilled material is introduced into a wastewater treatment system, chemical and biological oxygen demand (COD and BOD) will likely increase. This material is biodegradable if gradually exposed to microorganisms, preferably in an aerobic environment. In sewage-seeded wastewater, at or below concentrations of 0.2 vol.% of this material, there is little or no effect on bio-oxidation and/or digestion. However, at 1 vol.%, it doubles the required digestion period. Higher concentrations interfere with floc formation and sludge settling and also plug filters or exchange beds. Vapor emissions from a bio-oxidation process contaminated with this material can be a health hazard.

### **Section 14 - Transportation Information**

#### **DOT - United States - Department of Transportation**

- Shipping Name:** Gasoline
- ID Number:** 1203
- Hazard Class:** 3
- Packing Group:** II

#### **TDG - Canada - Transport of Dangerous Goods**

- Shipping Name:** Gasoline
- ID Number:** 1203
- Hazard Class:** 3
- Packing Group:** II

#### **IMO/IMDG -International Maritime Transport**

- Shipping Name:** Gasoline
- ID Number:** 1203
- Hazard Class:** 3
- Packing Group:** II

**ADN - Europe Transport of Dangerous Goods by Road/Inland Waterway**

**Shipping Name:** Gasoline  
**ID Number:** 1203  
**Hazard Class:** 3  
**Packing Group:** II

**IATA - International Air Transport Association**

**Shipping Name:** Gasoline  
**ID Number:** 1203  
**Hazard Class:** 3  
**Packing Group:** II

**ADR - Europe Transport of Dangerous Goods by Road/Inland Waterway**

**Shipping Name:** Gasoline  
**ID Number:** 1203  
**Hazard Class:** 3  
**Packing Group:** II

**RID - Europe Transport of Dangerous Goods by Railways**

**Shipping Name:** Gasoline  
**ID Number:** 1203  
**Hazard Class:** 3  
**Packing Group:** II

**Section 15 - Regulatory Information**

- SARA Hazard Classifications**   ▪ Acute, Chronic, Fire
- Risk & Safety Phrases**       ▪ R11 Highly flammable.  
R38 Irritating to skin.  
R65 Harmful: may cause lung damage if swallowed.  
R67 Vapours may cause drowsiness and dizziness.  
R45 May cause cancer.  
R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.  
R46 May cause heritable genetic damage.  
R62 Possible risk of impaired fertility.  
R63 Possible risk of harm to the unborn child.  
R52 Harmful to aquatic organisms.  
R53 May cause long-term adverse effects in the aquatic environment.  
S9 Keep container in a well ventilated place.  
S16 Keep away from sources of ignition - No Smoking.  
S33 Take precautionary measures against static discharges.  
S23 Do not breathe gas/fumes/vapour/spray.  
S36 Wear suitable protective clothing.  
S27 Take off immediately all contaminated clothing.  
S29 Do not empty into drains.  
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S53 Avoid exposure - obtain special instructions before use.  
S61 Avoid release to the environment. Refer to special instructions/ Safety Data Sheets.  
S62 If swallowed, do not induce vomiting. Seek medical advice immediately and show the container or label.

**State Right To Know**



Component	CAS	MA	NJ	PA
Octane	111-65-9	Yes	Yes	Yes
Octane Isomers	NDA	No	No	No
Pentanes	NDA	No	No	No
Toluene	108-88-3	Yes	Yes	Yes
Xylene	1330-20-7	Yes	Yes	Yes
Heptane	142-82-5	Yes	Yes	Yes
Heptane Isomers	NDA	No	No	No
Hexane isomers	NDA	No	No	No
2-Methylbutane (In Liquid form)	78-78-4	Yes	Yes	Yes
Butane	106-97-8	Yes	Yes	Yes
Nonane	111-84-2	Yes	Yes	Yes
Nonane Isomers	NDA	No	No	No
Hexane	110-54-3	Yes	Yes	Yes
Benzene, trimethyl-	25551-13-7	Yes	Yes	Yes
Methylcyclohexane	108-87-2	Yes	Yes	Yes
Benzene	71-43-2	Yes	Yes	Yes
1-Methylethylbenzene	98-82-8	Yes	Yes	Yes
Ethylbenzene	100-41-4	Yes	Yes	Yes
Ethyl toluene	25550-14-5	No	Yes	No
Hexene	25264-93-1	No	No	No
Hexene, All Isomers	NDA	No	No	No
Methylcyclopentane	96-37-7	Yes	Yes	Yes
Cyclohexane	110-82-7	Yes	Yes	Yes
Cyclopentane	287-92-3	Yes	Yes	Yes
Naphthalene	91-20-3	Yes	Yes	Yes
Benzene, propyl-	103-65-1	Yes	Yes	Yes
Indene	95-13-6	Yes	Yes	Yes
Styrene	100-42-5	Yes	Yes	Yes

**Inventory**

Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA
Octane	111-65-9	Yes	No	Yes	No	Yes
Octane Isomers	NDA	No	No	No	No	No
Pentanes	NDA	No	No	No	No	No
Toluene	108-88-3	Yes	No	Yes	No	Yes
Xylene	1330-20-7	Yes	No	Yes	No	Yes
Heptane	142-82-5	Yes	No	Yes	No	Yes
Heptane Isomers	NDA	No	No	No	No	No
Hexane isomers	NDA	No	No	No	No	No
2-Methylbutane (In Liquid form)	78-78-4	Yes	No	Yes	No	Yes
Butane	106-97-8	Yes	No	Yes	No	Yes
Nonane	111-84-2	Yes	No	Yes	No	Yes
Nonane Isomers	NDA	No	No	No	No	No
Hexane	110-54-3	Yes	No	Yes	No	Yes
Benzene, trimethyl-	25551-13-7	Yes	No	Yes	No	Yes
Methylcyclohexane	108-87-2	Yes	No	Yes	No	Yes
Benzene	71-43-2	Yes	No	Yes	No	Yes
1-Methylethylbenzene	98-82-8	Yes	No	Yes	No	Yes
Ethylbenzene	100-41-4	Yes	No	Yes	No	Yes
Ethyl toluene	25550-14-5	Yes	No	Yes	No	Yes
Hexene	25264-93-1	No	Yes	Yes	No	Yes
Hexene, All Isomers	NDA	No	No	No	No	No
Methylcyclopentane	96-37-7	Yes	No	Yes	No	Yes
Cyclohexane	110-82-7	Yes	No	Yes	No	Yes
Cyclopentane	287-92-3	Yes	No	Yes	No	Yes
Naphthalene	91-20-3	Yes	No	Yes	No	Yes
Benzene, propyl-	103-65-1	Yes	No	Yes	No	Yes
Indene	95-13-6	Yes	No	Yes	No	Yes
Styrene	100-42-5	Yes	No	Yes	No	Yes

## Canada

### Labor

#### Canada - WHMIS - Classifications of Substances

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	B2
● Indene	95-13-6	0.5% TO 1.5%	B3
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	B2
● Cyclopentane	287-92-3	1% TO 2%	B2
● Octane	111-65-9	5% TO 20%	B2, D2B
● Nonane	111-84-2	0% TO 10%	B2, D2B
● Naphthalene	91-20-3	0.1% TO 2%	B4, D2A
● Benzene, trimethyl-	25551-13-7	1% TO 5%	B3
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	B2
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	B2
● Cyclohexane	110-82-7	0% TO 3%	B2, D2B
● Ethylbenzene	100-41-4	0.2% TO 4%	B2, D2A, D2B
● Heptane	142-82-5	5% TO 15%	B2, D2B
● Styrene	100-42-5	0% TO 1%	B2, D2A
● Toluene	108-88-3	1% TO 20%	B2, D2A, D2B
● Xylene	1330-20-7	1% TO 18%	B2, D2A, D2B
● Benzene	71-43-2	0% TO 4.9%	B2, D2A, D2B
● Butane	106-97-8	0% TO 10%	A, B1
● Hexane	110-54-3	1% TO 8%	B2, D2A, D2B
● Hexene	25264-93-1	1% TO 3%	Not Listed

#### Canada - WHMIS - Ingredient Disclosure List

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	1 %
● Indene	95-13-6	0.5% TO 1.5%	1 %
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	1 %
● Octane	111-65-9	5% TO 20%	1 %
● Nonane	111-84-2	0% TO 10%	1 %
● Naphthalene	91-20-3	0.1% TO 2%	1 %
● Benzene, trimethyl-	25551-13-7	1% TO 5%	1 %
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	1 %
● Cyclohexane	110-82-7	0% TO 3%	1 %
● Ethylbenzene	100-41-4	0.2% TO 4%	0.1 %
● Heptane	142-82-5	5% TO 15%	1 %
● Styrene	100-42-5	0% TO 1%	0.1 %
● Toluene	108-88-3	1% TO 20%	1 %
● Xylene	1330-20-7	1% TO 18%	Not Listed
● Benzene	71-43-2	0% TO 4.9%	0.1 %
● Butane	106-97-8	0% TO 10%	1 %
● Hexane	110-54-3	1% TO 8%	1 %
● Hexene	25264-93-1	1% TO 3%	Not Listed

### Environment

#### Canada - CEPA - Priority Substances List

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed

• Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
• Cyclopentane	287-92-3	1% TO 2%	Not Listed
• Octane	111-65-9	5% TO 20%	Not Listed
• Nonane	111-84-2	0% TO 10%	Not Listed
• Naphthalene	91-20-3	0.1% TO 2%	Not Listed
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
• Cyclohexane	110-82-7	0% TO 3%	Not Listed
• Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
• Heptane	142-82-5	5% TO 15%	Not Listed
• Styrene	100-42-5	0% TO 1%	Priority Substance List 1 (substance not considered toxic)
• Toluene	108-88-3	1% TO 20%	Priority Substance List 1 (substance not considered toxic)
• Xylene	1330-20-7	1% TO 18%	Priority Substance List 1 (substance not considered toxic)
• Benzene	71-43-2	0% TO 4.9%	Priority Substance List 1 (substance considered toxic)
• Butane	106-97-8	0% TO 10%	Not Listed
• Hexane	110-54-3	1% TO 8%	Not Listed
• Hexene	25264-93-1	1% TO 3%	Not Listed

## Europe

### Other

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
• Methylcyclohexane	108-87-2	1% TO 5%	F; R11 Xi; R38 N; R51 R53 Xn; R65 R67
• Indene	95-13-6	0.5% TO 1.5%	Not Listed
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	R10 Xi; R37 N; R51 R53 Xn; R65
• Cyclopentane	287-92-3	1% TO 2%	F; R11 R52 R53
• Octane	111-65-9	5% TO 20%	F; R11 Xi; R38 N; R50 R53 Xn; R65 R67
• Nonane	111-84-2	0% TO 10%	Not Listed
• Naphthalene	91-20-3	0.1% TO 2%	Xn; R22 Carc.Cat.3; R40 N; R50 R53
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	F+; R12 N; R51 R53 Xn; R65 R66 R67
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	R10 Xi; R37 N; R51 R53 Xn; R65
• Cyclohexane	110-82-7	0% TO 3%	F; R11 Xi; R38 N; R50 R53 Xn; R65 R67
• Ethylbenzene	100-41-4	0.2% TO 4%	F; R11 Xn; R20
• Heptane	142-82-5	5% TO 15%	F; R11 Xi; R38 N; R50 R53 Xn; R65 R67
• Styrene	100-42-5	0% TO 1%	R10 Xn; R20 Xi; R36/38
• Toluene	108-88-3	1% TO 20%	F; R11 Xi; R38 Xn; R48/20 R65 Repr.Cat.3; R63 R67
• Xylene	1330-20-7	1% TO 18%	R10 Xn; R20/21 Xi; R38
• Benzene	71-43-2	0% TO 4.9%	F; R11 Xi; R36/38 Carc.Cat.1; R45 Muta.Cat.2; R46 T; R48/23/24/25 Xn; R65
• Butane	106-97-8	0% TO 10%	F+; R12
• Hexane	110-54-3	1% TO 8%	F; R11 Xi; R38 N; R51 R53 Repr.Cat.3; R62 Xn; R65 R48/20 R67
• Hexene	25264-93-1	1% TO 3%	Not Listed

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
• Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
• Indene	95-13-6	0.5% TO 1.5%	Not Listed
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
• Cyclopentane	287-92-3	1% TO 2%	Not Listed
• Octane	111-65-9	5% TO 20%	Not Listed
• Nonane	111-84-2	0% TO 10%	Not Listed

● Naphthalene	91-20-3	0.1% TO 2%	Not Listed
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
● Cyclohexane	110-82-7	0% TO 3%	Not Listed
● Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
● Heptane	142-82-5	5% TO 15%	Not Listed
● Styrene	100-42-5	0% TO 1%	12.5%<=C: Xn; R20 12.5%<=C: Xi; R36/38
● Toluene	108-88-3	1% TO 20%	Not Listed
● Xylene	1330-20-7	1% TO 18%	12.5%<=C: Xn; R20/21
● Benzene	71-43-2	0% TO 4.9%	Not Listed
● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	5%<=C: Xn; R48/20
● Hexene	25264-93-1	1% TO 3%	Not Listed

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling**

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	F Xn N R:11-38-51/53-65-67 S:(2)-9-16-33-61-62
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Xn N R:10-37-51/53-65 S:(2)-24-37-61-62
● Cyclopentane	287-92-3	1% TO 2%	F R:11-52/53 S:(2)-9-16-29-33-61
● Octane	111-65-9	5% TO 20%	F Xn N R:11-38-65-67-50/53 S:(2)-9-16-29-33-60-61-62
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	Xn N R:22-40-50/53 S:(2)-36/37-46-60-61
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	F+ Xn N R:12-51/53-65-66-67 S:(2)-9-16-29-33-61-62
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Xn N R:10-37-51/53-65 S:(2)-24-37-61-62
● Cyclohexane	110-82-7	0% TO 3%	F Xn N R:11-38-65-67-50/53 S:(2)-9-16-25-33-60-61-62
● Ethylbenzene	100-41-4	0.2% TO 4%	F Xn R:11-20 S:(2)-16-24/25-29
● Heptane	142-82-5	5% TO 15%	F Xn N R:11-38-65-67-50/53 S:(2)-9-16-29-33-60-61-62
● Styrene	100-42-5	0% TO 1%	Xn R:10-20-36/38 S:(2)-23
● Toluene	108-88-3	1% TO 20%	F Xn R:11-38-48/20-63-65-67 S:(2)-36/37-46-62
● Xylene	1330-20-7	1% TO 18%	Xn R:10-20/21-38 S:(2)-25
● Benzene	71-43-2	0% TO 4.9%	F T R:45-46-11-36/38-48/23/24/25-65 S:53-45
● Butane	106-97-8	0% TO 10%	F+ R:12 S:(2)-9-16
● Hexane	110-54-3	1% TO 8%	F Xn N R:11-38-48/20-62-65-67-51/53 S:(2)-9-16-29-33-36/37-61-62
● Hexene	25264-93-1	1% TO 3%	Not Listed

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations**

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	C
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	C
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	Not Listed
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	C
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	C
● Cyclohexane	110-82-7	0% TO 3%	Not Listed
● Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
● Heptane	142-82-5	5% TO 15%	C
● Styrene	100-42-5	0% TO 1%	D

• Toluene	108-88-3	1% TO 20%	Not Listed
• Xylene	1330-20-7	1% TO 18%	C
• Benzene	71-43-2	0% TO 4.9%	E
• Butane	106-97-8	0% TO 10%	C
• Hexane	110-54-3	1% TO 8%	Not Listed
• Hexene	25264-93-1	1% TO 3%	Not Listed

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases**

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
• Methylcyclohexane	108-87-2	1% TO 5%	S:(2)-9-16-33-61-62
• Indene	95-13-6	0.5% TO 1.5%	Not Listed
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	S:(2)-24-37-61-62
• Cyclopentane	287-92-3	1% TO 2%	S:(2)-9-16-29-33-61
• Octane	111-65-9	5% TO 20%	S:(2)-9-16-29-33-60-61-62
• Nonane	111-84-2	0% TO 10%	Not Listed
• Naphthalene	91-20-3	0.1% TO 2%	S:(2)-36/37-46-60-61
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	S:(2)-9-16-29-33-61-62
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	S:(2)-24-37-61-62
• Cyclohexane	110-82-7	0% TO 3%	S:(2)-9-16-25-33-60-61-62
• Ethylbenzene	100-41-4	0.2% TO 4%	S:(2)-16-24/25-29
• Heptane	142-82-5	5% TO 15%	S:(2)-9-16-29-33-60-61-62
• Styrene	100-42-5	0% TO 1%	S:(2)-23
• Toluene	108-88-3	1% TO 20%	S:(2)-36/37-46-62
• Xylene	1330-20-7	1% TO 18%	S:(2)-25
• Benzene	71-43-2	0% TO 4.9%	S:53-45
• Butane	106-97-8	0% TO 10%	S:(2)-9-16
• Hexane	110-54-3	1% TO 8%	S:(2)-9-16-29-33-36/37-61-62
• Hexene	25264-93-1	1% TO 3%	Not Listed

**United States**

**Labor**

**U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
• Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
• Indene	95-13-6	0.5% TO 1.5%	Not Listed
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
• Cyclopentane	287-92-3	1% TO 2%	Not Listed
• Octane	111-65-9	5% TO 20%	Not Listed
• Nonane	111-84-2	0% TO 10%	Not Listed
• Naphthalene	91-20-3	0.1% TO 2%	Not Listed
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
• Cyclohexane	110-82-7	0% TO 3%	Not Listed
• Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
• Heptane	142-82-5	5% TO 15%	Not Listed
• Styrene	100-42-5	0% TO 1%	Not Listed
• Toluene	108-88-3	1% TO 20%	Not Listed
• Xylene	1330-20-7	1% TO 18%	Not Listed
• Benzene	71-43-2	0% TO 4.9%	Not Listed
• Butane	106-97-8	0% TO 10%	Not Listed
• Hexane	110-54-3	1% TO 8%	Not Listed
• Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - OSHA - Specifically Regulated Chemicals**

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed	
• Methylcyclohexane	108-87-2	1% TO 5%	Not Listed	
• Indene	95-13-6	0.5% TO 1.5%	Not Listed	
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed	
• Cyclopentane	287-92-3	1% TO 2%	Not Listed	
• Octane	111-65-9	5% TO 20%	Not Listed	
• Nonane	111-84-2	0% TO 10%	Not Listed	
• Naphthalene	91-20-3	0.1% TO 2%	Not Listed	
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed	
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed	
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed	
• Cyclohexane	110-82-7	0% TO 3%	Not Listed	
• Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed	
• Heptane	142-82-5	5% TO 15%	Not Listed	
• Styrene	100-42-5	0% TO 1%	Not Listed	
• Toluene	108-88-3	1% TO 20%	Not Listed	
• Xylene	1330-20-7	1% TO 18%	Not Listed	
• Benzene	71-43-2	0% TO 4.9%	Not Listed	5 ppm STEL (Cancer hazard, Flammable, See 29 CFR 1910.1028, 15 min); 0.5 ppm Action Level; 1 ppm TWA
• Butane	106-97-8	0% TO 10%	Not Listed	
• Hexane	110-54-3	1% TO 8%	Not Listed	
• Hexene	25264-93-1	1% TO 3%	Not Listed	

**Environment****U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed	
• Methylcyclohexane	108-87-2	1% TO 5%	Not Listed	
• Indene	95-13-6	0.5% TO 1.5%	Not Listed	
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed	
• Cyclopentane	287-92-3	1% TO 2%	Not Listed	
• Octane	111-65-9	5% TO 20%	Not Listed	
• Nonane	111-84-2	0% TO 10%	Not Listed	
• Naphthalene	91-20-3	0.1% TO 2%	Not Listed	
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed	
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed	
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed	
• Cyclohexane	110-82-7	0% TO 3%	Not Listed	
• Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed	
• Heptane	142-82-5	5% TO 15%	Not Listed	
• Styrene	100-42-5	0% TO 1%	Not Listed	
• Toluene	108-88-3	1% TO 20%	Not Listed	
• Xylene	1330-20-7	1% TO 18%	Not Listed	(isomers and mixtures)
• Benzene	71-43-2	0% TO 4.9%	Not Listed	(including Benzene from gasoline)
• Butane	106-97-8	0% TO 10%	Not Listed	
• Hexane	110-54-3	1% TO 8%	Not Listed	
• Hexene	25264-93-1	1% TO 3%	Not Listed	

**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
• Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
• Indene	95-13-6	0.5% TO 1.5%	Not Listed

● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	100 lb final RQ; 45.4 kg final RQ
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	5000 lb final RQ; 2270 kg final RQ
● Cyclohexane	110-82-7	0% TO 3%	1000 lb final RQ; 454 kg final RQ
● Ethylbenzene	100-41-4	0.2% TO 4%	1000 lb final RQ; 454 kg final RQ
● Heptane	142-82-5	5% TO 15%	Not Listed
● Styrene	100-42-5	0% TO 1%	1000 lb final RQ; 454 kg final RQ
● Toluene	108-88-3	1% TO 20%	1000 lb final RQ; 454 kg final RQ
● Xylene	1330-20-7	1% TO 18%	100 lb final RQ; 45.4 kg final RQ
			10 lb final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule); 4.54 kg final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule)
● Benzene	71-43-2	0% TO 4.9%	
● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	5000 lb final RQ; 2270 kg final RQ
● Hexene	25264-93-1	1% TO 3%	Not Listed

#### U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	Not Listed
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
● Cyclohexane	110-82-7	0% TO 3%	Not Listed
● Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
● Heptane	142-82-5	5% TO 15%	Not Listed
● Styrene	100-42-5	0% TO 1%	Not Listed
● Toluene	108-88-3	1% TO 20%	Not Listed
● Xylene	1330-20-7	1% TO 18%	Not Listed
● Benzene	71-43-2	0% TO 4.9%	Not Listed
● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	Not Listed
● Hexene	25264-93-1	1% TO 3%	Not Listed

#### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	Not Listed



• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
• Cyclohexane	110-82-7	0% TO 3%	Not Listed
• Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
• Heptane	142-82-5	5% TO 15%	Not Listed
• Styrene	100-42-5	0% TO 1%	Not Listed
• Toluene	108-88-3	1% TO 20%	Not Listed
• Xylene	1330-20-7	1% TO 18%	Not Listed
• Benzene	71-43-2	0% TO 4.9%	Not Listed
• Butane	106-97-8	0% TO 10%	Not Listed
• Hexane	110-54-3	1% TO 8%	Not Listed
• Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs**

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
• Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
• Indene	95-13-6	0.5% TO 1.5%	Not Listed
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
• Cyclopentane	287-92-3	1% TO 2%	Not Listed
• Octane	111-65-9	5% TO 20%	Not Listed
• Nonane	111-84-2	0% TO 10%	Not Listed
• Naphthalene	91-20-3	0.1% TO 2%	Not Listed
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
• Cyclohexane	110-82-7	0% TO 3%	Not Listed
• Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
• Heptane	142-82-5	5% TO 15%	Not Listed
• Styrene	100-42-5	0% TO 1%	Not Listed
• Toluene	108-88-3	1% TO 20%	Not Listed
• Xylene	1330-20-7	1% TO 18%	Not Listed
• Benzene	71-43-2	0% TO 4.9%	Not Listed
• Butane	106-97-8	0% TO 10%	Not Listed
• Hexane	110-54-3	1% TO 8%	Not Listed
• Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
• Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
• Indene	95-13-6	0.5% TO 1.5%	Not Listed
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
• Cyclopentane	287-92-3	1% TO 2%	Not Listed
• Octane	111-65-9	5% TO 20%	Not Listed
• Nonane	111-84-2	0% TO 10%	Not Listed
• Naphthalene	91-20-3	0.1% TO 2%	0.1 % de minimis concentration
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	1.0 % de minimis concentration
• Cyclohexane	110-82-7	0% TO 3%	1.0 % de minimis concentration
• Ethylbenzene	100-41-4	0.2% TO 4%	0.1 % de minimis concentration
• Heptane	142-82-5	5% TO 15%	Not Listed
• Styrene	100-42-5	0% TO 1%	0.1 % de minimis concentration
• Toluene	108-88-3	1% TO 20%	1.0 % de minimis concentration

● Xylene	1330-20-7	1% TO 18%	1.0 % de minimis concentration
● Benzene	71-43-2	0% TO 4.9%	0.1 % de minimis concentration
● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	1.0 % de minimis concentration
● Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII**

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	Included in waste streams: F024, F025, F034, F039, K001, K035, K060, K087, K145
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
● Cyclohexane	110-82-7	0% TO 3%	Not Listed
● Ethylbenzene	100-41-4	0.2% TO 4%	Included in waste stream: F039
● Heptane	142-82-5	5% TO 15%	Not Listed
● Styrene	100-42-5	0% TO 1%	Not Listed
● Toluene	108-88-3	1% TO 20%	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151
● Xylene	1330-20-7	1% TO 18%	Included in waste stream: F039
● Benzene	71-43-2	0% TO 4.9%	Included in waste streams: F005, F024, F025, F037, F038, F039, K085, K104, K105, K141, K142, K143, K144, K145, K147, K151, K159, K169, K171, K172
● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	Not Listed
● Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring**

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	Not Listed
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
● Cyclohexane	110-82-7	0% TO 3%	Not Listed
● Ethylbenzene	100-41-4	0.2% TO 4%	
● Heptane	142-82-5	5% TO 15%	Not Listed
● Styrene	100-42-5	0% TO 1%	
● Toluene	108-88-3	1% TO 20%	
● Xylene	1330-20-7	1% TO 18%	
● Benzene	71-43-2	0% TO 4.9%	
● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	Not Listed
● Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - D Series Wastes - Max Conc of Contaminants for the Toxic Characteristic**

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	Not Listed
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
● Cyclohexane	110-82-7	0% TO 3%	Not Listed
● Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
● Heptane	142-82-5	5% TO 15%	Not Listed
● Styrene	100-42-5	0% TO 1%	Not Listed
● Toluene	108-88-3	1% TO 20%	Not Listed
● Xylene	1330-20-7	1% TO 18%	Not Listed
● Benzene	71-43-2	0% TO 4.9%	0.5 mg/L regulatory level
● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	Not Listed
● Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261**

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	waste number U165
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
● Cyclohexane	110-82-7	0% TO 3%	Not Listed
● Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
● Heptane	142-82-5	5% TO 15%	Not Listed
● Styrene	100-42-5	0% TO 1%	Not Listed
● Toluene	108-88-3	1% TO 20%	waste number U220
● Xylene	1330-20-7	1% TO 18%	Not Listed
● Benzene	71-43-2	0% TO 4.9%	waste number U019
● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	Not Listed
● Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents**

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed

• Nonane	111-84-2	0% TO 10%	Not Listed
• Naphthalene	91-20-3	0.1% TO 2%	
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
• Cyclohexane	110-82-7	0% TO 3%	Not Listed
• Ethylbenzene	100-41-4	0.2% TO 4%	
• Heptane	142-82-5	5% TO 15%	Not Listed
• Styrene	100-42-5	0% TO 1%	
• Toluene	108-88-3	1% TO 20%	
• Xylene	1330-20-7	1% TO 18%	
• Benzene	71-43-2	0% TO 4.9%	
• Butane	106-97-8	0% TO 10%	Not Listed
• Hexane	110-54-3	1% TO 8%	Not Listed
• Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards**

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
• Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
• Indene	95-13-6	0.5% TO 1.5%	Not Listed
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
• Cyclopentane	287-92-3	1% TO 2%	Not Listed
• Octane	111-65-9	5% TO 20%	Not Listed
• Nonane	111-84-2	0% TO 10%	Not Listed
• Naphthalene	91-20-3	0.1% TO 2%	0.059 mg/L (wastewater); 5.6 mg/kg (nonwastewater)
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
• Cyclohexane	110-82-7	0% TO 3%	Not Listed
• Ethylbenzene	100-41-4	0.2% TO 4%	0.057 mg/L (wastewater); 10 mg/kg (nonwastewater)
• Heptane	142-82-5	5% TO 15%	Not Listed
• Styrene	100-42-5	0% TO 1%	Not Listed
• Toluene	108-88-3	1% TO 20%	0.080 mg/L (wastewater); 10 mg/kg (nonwastewater)
• Xylene	1330-20-7	1% TO 18%	0.32 mg/L (wastewater); 30 mg/kg (nonwastewater)
• Benzene	71-43-2	0% TO 4.9%	0.14 mg/L (wastewater); 10 mg/kg (nonwastewater)
• Butane	106-97-8	0% TO 10%	Not Listed
• Hexane	110-54-3	1% TO 8%	Not Listed
• Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring**

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
• Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
• Indene	95-13-6	0.5% TO 1.5%	Not Listed
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
• Cyclopentane	287-92-3	1% TO 2%	Not Listed
• Octane	111-65-9	5% TO 20%	Not Listed
• Nonane	111-84-2	0% TO 10%	Not Listed
• Naphthalene	91-20-3	0.1% TO 2%	
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
• Cyclohexane	110-82-7	0% TO 3%	Not Listed
• Ethylbenzene	100-41-4	0.2% TO 4%	
• Heptane	142-82-5	5% TO 15%	Not Listed

• Styrene	100-42-5	0% TO 1%	
• Toluene	108-88-3	1% TO 20%	
• Xylene	1330-20-7	1% TO 18%	
• Benzene	71-43-2	0% TO 4.9%	
• Butane	106-97-8	0% TO 10%	Not Listed
• Hexane	110-54-3	1% TO 8%	Not Listed
• Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics**

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
• Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
• Indene	95-13-6	0.5% TO 1.5%	Not Listed
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
• Cyclopentane	287-92-3	1% TO 2%	Not Listed
• Octane	111-65-9	5% TO 20%	Not Listed
• Nonane	111-84-2	0% TO 10%	Not Listed
• Naphthalene	91-20-3	0.1% TO 2%	waste number U165
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	waste number U055 (Ignitable waste)
• Cyclohexane	110-82-7	0% TO 3%	waste number U056 (Ignitable waste)
• Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
• Heptane	142-82-5	5% TO 15%	Not Listed
• Styrene	100-42-5	0% TO 1%	Not Listed
• Toluene	108-88-3	1% TO 20%	waste number U220
• Xylene	1330-20-7	1% TO 18%	waste number U239 (Ignitable waste, Toxic waste)
• Benzene	71-43-2	0% TO 4.9%	waste number U019 (Ignitable waste, Toxic waste)
• Butane	106-97-8	0% TO 10%	Not Listed
• Hexane	110-54-3	1% TO 8%	Not Listed
• Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Waste Minimization Priority Chemicals**

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
• Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
• Indene	95-13-6	0.5% TO 1.5%	Not Listed
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
• Cyclopentane	287-92-3	1% TO 2%	Not Listed
• Octane	111-65-9	5% TO 20%	Not Listed
• Nonane	111-84-2	0% TO 10%	Not Listed
• Naphthalene	91-20-3	0.1% TO 2%	
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
• Cyclohexane	110-82-7	0% TO 3%	Not Listed
• Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
• Heptane	142-82-5	5% TO 15%	Not Listed
• Styrene	100-42-5	0% TO 1%	Not Listed
• Toluene	108-88-3	1% TO 20%	Not Listed
• Xylene	1330-20-7	1% TO 18%	Not Listed
• Benzene	71-43-2	0% TO 4.9%	Not Listed
• Butane	106-97-8	0% TO 10%	Not Listed
• Hexane	110-54-3	1% TO 8%	Not Listed
• Hexene	25264-93-1	1% TO 3%	Not Listed

## United States - California

### Environment

#### U.S. - California - Proposition 65 - Carcinogens List

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	carcinogen, initial date 4/19/02
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
● Cyclohexane	110-82-7	0% TO 3%	Not Listed
● Ethylbenzene	100-41-4	0.2% TO 4%	carcinogen, initial date 6/11/04
● Heptane	142-82-5	5% TO 15%	Not Listed
● Styrene	100-42-5	0% TO 1%	Not Listed
● Toluene	108-88-3	1% TO 20%	Not Listed
● Xylene	1330-20-7	1% TO 18%	Not Listed
● Benzene	71-43-2	0% TO 4.9%	carcinogen, initial date 2/27/87
● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	Not Listed
● Hexene	25264-93-1	1% TO 3%	Not Listed

#### U.S. - California - Proposition 65 - Developmental Toxicity

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	Not Listed
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
● Cyclohexane	110-82-7	0% TO 3%	Not Listed
● Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
● Heptane	142-82-5	5% TO 15%	Not Listed
● Styrene	100-42-5	0% TO 1%	Not Listed
● Toluene	108-88-3	1% TO 20%	developmental toxicity, initial date 1/1/91
● Xylene	1330-20-7	1% TO 18%	Not Listed
● Benzene	71-43-2	0% TO 4.9%	developmental toxicity, initial date 12/26/97
● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	Not Listed
● Hexene	25264-93-1	1% TO 3%	Not Listed

#### U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed

● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	Not Listed
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
● Cyclohexane	110-82-7	0% TO 3%	Not Listed
● Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
● Heptane	142-82-5	5% TO 15%	Not Listed
● Styrene	100-42-5	0% TO 1%	Not Listed
● Toluene	108-88-3	1% TO 20%	7000 µg/day MADL (level represents absorbed dose)
● Xylene	1330-20-7	1% TO 18%	Not Listed
● Benzene	71-43-2	0% TO 4.9%	24 µg/day MADL (oral); 49 µg/day MADL (inhalation)
● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	Not Listed
● Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)**

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	5.8 µg/day NSRL
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
● Cyclohexane	110-82-7	0% TO 3%	Not Listed
● Ethylbenzene	100-41-4	0.2% TO 4%	54 µg/day NSRL (inhalation); 41 µg/day NSRL (oral)
● Heptane	142-82-5	5% TO 15%	Not Listed
● Styrene	100-42-5	0% TO 1%	Not Listed
● Toluene	108-88-3	1% TO 20%	Not Listed
● Xylene	1330-20-7	1% TO 18%	Not Listed
● Benzene	71-43-2	0% TO 4.9%	6.4 µg/day NSRL (oral); 13 µg/day NSRL (inhalation)
● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	Not Listed
● Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Female**

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	Not Listed
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
● Cyclohexane	110-82-7	0% TO 3%	Not Listed

• Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
• Heptane	142-82-5	5% TO 15%	Not Listed
• Styrene	100-42-5	0% TO 1%	Not Listed
• Toluene	108-88-3	1% TO 20%	female reproductive toxicity, initial date 8/7/09
• Xylene	1330-20-7	1% TO 18%	Not Listed
• Benzene	71-43-2	0% TO 4.9%	Not Listed
• Butane	106-97-8	0% TO 10%	Not Listed
• Hexane	110-54-3	1% TO 8%	Not Listed
• Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Male**

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
• Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
• Indene	95-13-6	0.5% TO 1.5%	Not Listed
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
• Cyclopentane	287-92-3	1% TO 2%	Not Listed
• Octane	111-65-9	5% TO 20%	Not Listed
• Nonane	111-84-2	0% TO 10%	Not Listed
• Naphthalene	91-20-3	0.1% TO 2%	Not Listed
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
• Cyclohexane	110-82-7	0% TO 3%	Not Listed
• Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
• Heptane	142-82-5	5% TO 15%	Not Listed
• Styrene	100-42-5	0% TO 1%	Not Listed
• Toluene	108-88-3	1% TO 20%	Not Listed
• Xylene	1330-20-7	1% TO 18%	Not Listed
• Benzene	71-43-2	0% TO 4.9%	male reproductive toxicity, initial date 12/26/97
• Butane	106-97-8	0% TO 10%	Not Listed
• Hexane	110-54-3	1% TO 8%	Not Listed
• Hexene	25264-93-1	1% TO 3%	Not Listed

**United States - Pennsylvania**

**Labor**

**U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
• Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
• Indene	95-13-6	0.5% TO 1.5%	Not Listed
• Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
• Cyclopentane	287-92-3	1% TO 2%	Not Listed
• Octane	111-65-9	5% TO 20%	Not Listed
• Nonane	111-84-2	0% TO 10%	Not Listed
• Naphthalene	91-20-3	0.1% TO 2%	
• Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
• 1-Methylethylbenzene	98-82-8	0.5% TO 4%	
• Cyclohexane	110-82-7	0% TO 3%	
• Ethylbenzene	100-41-4	0.2% TO 4%	
• Heptane	142-82-5	5% TO 15%	Not Listed
• Styrene	100-42-5	0% TO 1%	
• Toluene	108-88-3	1% TO 20%	
• Xylene	1330-20-7	1% TO 18%	
• Benzene	71-43-2	0% TO 4.9%	



● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	Not Listed
● Hexene	25264-93-1	1% TO 3%	Not Listed

**U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances**

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Not Listed
● Indene	95-13-6	0.5% TO 1.5%	Not Listed
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Not Listed
● Octane	111-65-9	5% TO 20%	Not Listed
● Nonane	111-84-2	0% TO 10%	Not Listed
● Naphthalene	91-20-3	0.1% TO 2%	Not Listed
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Not Listed
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Not Listed
● Cyclohexane	110-82-7	0% TO 3%	Not Listed
● Ethylbenzene	100-41-4	0.2% TO 4%	Not Listed
● Heptane	142-82-5	5% TO 15%	Not Listed
● Styrene	100-42-5	0% TO 1%	Not Listed
● Toluene	108-88-3	1% TO 20%	Not Listed
● Xylene	1330-20-7	1% TO 18%	Not Listed
● Benzene	71-43-2	0% TO 4.9%	
● Butane	106-97-8	0% TO 10%	Not Listed
● Hexane	110-54-3	1% TO 8%	Not Listed
● Hexene	25264-93-1	1% TO 3%	Not Listed

**United States - Rhode Island**

**Labor**

**U.S. - Rhode Island - Hazardous Substance List**

● Ethyl toluene	25550-14-5	1% TO 3%	Not Listed
● Methylcyclohexane	108-87-2	1% TO 5%	Toxic
● Indene	95-13-6	0.5% TO 1.5%	Toxic
● Benzene, propyl-	103-65-1	0.5% TO 1.5%	Not Listed
● Cyclopentane	287-92-3	1% TO 2%	Toxic; Flammable
● Octane	111-65-9	5% TO 20%	Toxic; Flammable
● Nonane	111-84-2	0% TO 10%	Toxic
● Naphthalene	91-20-3	0.1% TO 2%	Toxic; Flammable
● Benzene, trimethyl-	25551-13-7	1% TO 5%	Toxic
● 2-Methylbutane (In Liquid form)	78-78-4	0% TO 10%	Not Listed
● 1-Methylethylbenzene	98-82-8	0.5% TO 4%	Toxic (skin); Flammable (skin)
● Cyclohexane	110-82-7	0% TO 3%	Toxic; Flammable
● Ethylbenzene	100-41-4	0.2% TO 4%	Toxic; Flammable
● Heptane	142-82-5	5% TO 15%	Toxic; Flammable
● Styrene	100-42-5	0% TO 1%	Toxic; Flammable
● Toluene	108-88-3	1% TO 20%	Toxic (skin); Flammable (skin)
● Xylene	1330-20-7	1% TO 18%	Toxic (skin); Flammable (skin)
● Benzene	71-43-2	0% TO 4.9%	Toxic (skin); Flammable (skin); Carcinogen (skin)
● Butane	106-97-8	0% TO 10%	Toxic; Flammable
● Hexane	110-54-3	1% TO 8%	Toxic; Flammable
● Hexene	25264-93-1	1% TO 3%	Not Listed

## Section 16 - Other Information

- Preparation Date**                   ▪ 02/09/2011
- Last Revision Date**               ▪ 02/09/2011
- Disclaimer/Statement of Liability**                   ▪ The above data is based on tests and experience which Delek Refining, Ltd believes reliable and is supplied for information purposes only. Delek Refining, Ltd disclaims any liability for damage or injury which results from the use of the above data and nothing contained therein shall constitute a guarantee, warranty (including warranty of merchantability) or representation (including freedom from patent liability) by Delek Refining, Ltd with respect to the data, the product described, to their use for any specific purpose, even if that purpose is known to Delek Refining, Ltd.

**Key to abbreviations**  
NDA = No Data Available



# Safety Data Sheet

## Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

### 1.1 Product identifier

- Product Name** • Ultra Low Sulfur Diesel
- Synonyms** • ASTM No. 2-D Grade Diesel Fuel (defined by ASTM D-975); Burner Fuel No. 2; Diesel Oil (Medium); Fuel Oil No. 2 (defined by ASTM D-396); Furnace Oil; Home Medium Oil; No. 2 Diesel; No. 2 Distillate Fuel; No. 2 Heating Oil

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

- Relevant identified use(s)** • Diesel Fuel

### 1.3 Details of the supplier of the safety data sheet

- Manufacturer** • Delek Refining, Ltd.  
 425 McMurrey Drive  
 Tyler, TX 75702  
 United States  
 www.delekus.com
- Telephone (General)** • 903-579-3400

### 1.4 Emergency telephone number

- Manufacturer** • (800) 424-9300 - 24 Hour CHEMTREC - National
- Manufacturer** • (703) 527-3887 - 24 Hour CHEMTREC - International

## Section 2: Hazards Identification

### EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]  
 According to: EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

### 2.1 Classification of the substance or mixture

- CLP** • Flammable Liquids 3 - H226  
 Carcinogenicity 2 - H351  
 Hazardous to the aquatic environment Chronic 3 - H412
- DSD/DPD** • Flammable  
 Carcinogenic Substances - Category 3  
 R10, R40, R52, R53

### 2.2 Label Elements

- CLP**
- WARNING**



- Hazard statements** • H226 - Flammable liquid and vapour  
 • H351 - Suspected of causing cancer.  
 • H412 - Harmful to aquatic life with long lasting effects

**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 and/or hot surfaces. - No smoking.  
 • P233 - Keep container tightly closed.  
 • P240 - Ground and/or 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.  
 • P273 - Avoid release to the environment.  
 • P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
 • P281 - Use personal protective equipment as required.
- Response** • P370+P378 - In case of fire: Use appropriate media for extinction.  
 • P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 • P308+P313 - IF exposed or concerned: Get medical advice/attention.
- Storage/Disposal** • P403+P235 - Store in a well-ventilated place. Keep cool.  
 • P405 - Store locked up.  
 • P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**DSD/DPD**



- Risk phrases** • R10 - Flammable.  
 • R40 - Limited evidence of a carcinogenic effect.  
 • R52 - Harmful to aquatic organisms.  
 • R53 - May cause long-term adverse effects in the aquatic environment.
- Safety phrases** • S36 - Wear suitable protective clothing.  
 • S37 - Wear suitable gloves.  
 • S53 - Avoid exposure - obtain special instructions before use.

**2.3 Other Hazards**

- CLP** • According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.
- DSD/DPD** • According to European Directive 1999/45/EC this material is considered dangerous.

**United States (US)**

According to: OSHA 29 CFR 1910.1200 HCS

**2.1 Classification of the substance or mixture**

- OSHA HCS 2012**
- Flammable Liquids 3
  - Aspiration 1
  - Skin Irritation 2
  - Eye Irritation 2
  - Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
  - Carcinogenicity 2

**2.2 Label elements**

OSHA HCS 2012

**DANGER**



- Hazard statements** • Flammable liquid and vapour  
 May be fatal if swallowed and enters airways  
 Causes skin irritation  
 Causes serious eye irritation  
 May cause drowsiness or dizziness  
 Suspected of causing cancer.

**Precautionary statements**

- Prevention** • Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.  
 Keep container tightly closed.  
 Ground and/or bond container and receiving equipment.  
 Use explosion-proof electrical/ventilating/lighting/equipment.  
 Use only non-sparking tools.  
 Take precautionary measures against static discharge.  
 Avoid breathing mists, vapours, and/or spray.  
 Wash thoroughly after handling.  
 Use only outdoors or in a well-ventilated area.  
 Wear protective gloves/protective clothing/eye protection/face protection.

- Response** • IF INHALED: 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.  
 In case of fire: Use appropriate media for extinction.  
 If on skin: Wash with plenty of water .  
 Specific treatment, see supplemental first aid information.  
 Take off contaminated clothing and wash before reuse.  
 If skin irritation occurs: Get medical advice/attention.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 If eye irritation persists: Get medical advice/attention.  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
 Do NOT induce vomiting.  
 IF exposed or concerned: Get medical advice/attention.

- Storage/Disposal** • Store in a well-ventilated place. Keep container tightly closed.  
 Keep cool.  
 Store locked up.  
 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**2.3 Other hazards**

**OSHA HCS 2012**

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

**Canada**

According to: WHMIS

**2.1 Classification of the substance or mixture**

**WHMIS**

- Combustible Liquids - B3
- Other Toxic Effects - D2A
- Other Toxic Effects - D2B

**2.2 Label elements**

**WHMIS**



- Combustible Liquids - B3
- Other Toxic Effects - D2A
- Other Toxic Effects - D2B

## 2.3 Other hazards

### WHMIS

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

## Section 3 - Composition/Information on Ingredients

### 3.1 Substances

- Material does not meet the criteria of a substance.

### 3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Fuels, diesel, No. 2	CAS:68476-34-6 EC Number:270-676-1 EU Index:649-227-00-2	100%	NDA	EU DSD/DPD: Annex VI, Table 3.2: Carc. Cat. 3, R40; R10; R52-R53 EU CLP: Annex VI, Table 3.1: Carc. 2, H351; Flam. Liq. 3, H226; Aquatic Chronic 3, H412 OSHA HCS 2012: Flam. Liq. 3; Eye Irrit. 2; Skin Irrit. 2; Asp. Tox. 1; Carc. 2; STOT SE 3: Narc.	NDA
Fuel oil, No.2	CAS:68476-30-2 EC Number:270-671-4 EU Index:649-225-00-1	100%	Ingestion/Oral-Rat LD50 • 12 g/kg Skin-Rabbit LD50 • 4720 µL/kg	EU DSD/DPD: Annex VI, Table 3.2: Carc. Cat. 3, R40; R10; R52-R53 EU CLP: Annex VI, Table 3.1: Carc. 2, H351; Flam. Liq. 3, H226; Aquatic Chronic 3, H412 OSHA HCS 2012: Flam. Liq. 3; Eye Irrit. 2; Skin Irrit. 2; Asp. Tox. 1; Carc. 2; STOT SE 3: Narc.	NDA
Naphthalene	CAS:91-20-3 EC Number:202-049-5 EU Index:601-052-00-2	< 1%	Skin-Rabbit LD50 • >20 g/kg Ingestion/Oral-Rat LD50 • 490 mg/kg	EU DSD/DPD: Annex VI, Table 3.2: Carc. Cat. 3, R40; Xn, R22; N, R50, R53 EU CLP: Annex VI, Table 3.1: Acute Tox. 4, H302; Carc. 2, H351; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Flam. Sol. 2; Acute Tox. 4 (Orl); Skin Irrit. 2; Muta. 2; Carc. 2; Repr. 2; STOT SE 3: Narc.; STOT RE 1 (Blood, Eyes; Orl, Inhl)	NDA
Mixture of additives	NDA	< 1%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA
Benzene, trimethyl-	CAS:25551-13-7 EC Number:247-099-9	< 1%	Ingestion/Oral-Rat LD50 • 8970 mg/kg	EU DSD/DPD: R10; Xi; R38; R67; Xn; R65; N; R51-R53 EU CLP: Flam. Liq. 3, H226; Skin Irrit. 2, H315; STOT SE 3: Narc., H336; Asp. Tox. 1, H304; Aquatic Chronic 2, H411 OSHA HCS 2012: Flam. Liq. 3; Eye Irrit. 2; Skin Irrit. 2; STOT SE 3: Narc.; Asp. Tox. 1	NDA
				EU DSD/DPD: Annex VI, Table 3.2: R10; Xn, R20; Xi,	

1,2,4-Trimethylbenzene	CAS:95-63-6 EC Number:202-436-9 EU Index:601-043-00-3	< 1%	Ingestion/Oral-Rat LD50 • 5 g/kg Inhalation-Rat LC50 • 18000 mg/m <sup>3</sup> 4 Hour (s)	R36/37/38; N, R51, R53 EU CLP: Annex VI, Table 3.1: Flam. Liq. 3, H226; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3: Resp. Irrit. (Inhl), H335; Aquatic Chronic 2, H411 OSHA HCS 2012: Flam. Liq. 3; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3: Narc; STOT SE 3: Resp. Irrit. (Inhl); Asp. Tox. 1	NDA
1,1'-Biphenyl	CAS:92-52-4 EC Number:202-163-5 EU Index:601-042-00-8	< 1%	Ingestion/Oral-Rat LD50 • 2140 mg/kg Skin-Rabbit LD50 • >5010 mg/kg	EU DSD/DPD: Annex VI, Table 3.2: Xi, R36/37/38; N, R50, R53 EU CLP: Annex VI, Table 3.1: Eye Irrit. 2, H319; STOT SE 3: Resp. Irrit., H335; Skin Irrit. 2, H315; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Skin Irrit. 2; Eye Irrit. 2; STOT RE 1 (PNS, CNS, Liver)	NDA

See Section 16 for full text of H-statements and R-phrases.

## Section 4 - First Aid Measures

### 4.1 Description of first aid measures

#### Inhalation

- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

#### Skin

- In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. Wash skin with soap and water. If skin irritation occurs: Get medical advice/attention.

#### Eye

- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

#### Ingestion

- Do NOT induce vomiting. Do not use mouth-to-mouth method if victim ingested the substance. Obtain medical attention immediately if ingested.

### 4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

### 4.3 Indication of any immediate medical attention and special treatment needed

#### Notes to Physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

## Section 5 - Firefighting Measures

### 5.1 Extinguishing media

**Suitable Extinguishing Media** • Use foam, water fog, dry chemical, CO<sub>2</sub>.

**Unsuitable Extinguishing Media** • Do not use straight water stream as it will scatter the fire.

### 5.2 Special hazards arising from the substance or mixture

#### Unusual Fire and Explosion Hazards

- Containers may explode when heated.  
Vapor explosion hazard indoors, outdoors or in sewers.  
HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.  
Many liquids are lighter than water.  
Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).  
Runoff to sewer may create fire or explosion hazard.  
Vapors may form explosive mixtures with air.  
Vapors may travel to source of ignition and flash back.

**Hazardous Combustion Products**

- Burning or excessive heating may produce smoke, carbon monoxide, carbon dioxide, or other harmful gasses/vapors.

**5.3 Advice for firefighters**

- Structural firefighters' protective clothing will only provide limited protection. Wear positive pressure self-contained breathing apparatus (SCBA).
- Move containers from fire area if you can do it without risk.
- LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out.

**Section 6 - Accidental Release Measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal Precautions**

- Ventilate enclosed areas. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

**Emergency Procedures**

- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet) ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Stay upwind. Keep out of low areas.

**6.2 Environmental precautions**

- Prevent entry into waterways, sewers, basements or confined areas.

**6.3 Methods and material for containment and cleaning up****Containment/Clean-up Measures**

- Stop leak if you can do it without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. A vapor suppressing foam may be used to reduce vapors. All equipment used when handling the product must be grounded. LARGE SPILLS: Dike far ahead of liquid spill for later disposal. LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

**6.4 Reference to other sections**

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

**Section 7 - Handling and Storage****7.1 Precautions for safe handling****Handling**

- Use only in well ventilated areas. Keep away from heat, sparks, and flame – No Smoking. Take precautionary measures against static charges. Use only non-sparking tools. All equipment used when handling the product must be grounded. Avoid contact with skin, eyes or clothing. Avoid breathing mist, vapours and/or spray. Wear appropriate personal protective equipment, avoid direct contact. Empty containers retain product residue and can be hazardous. Do not cut, weld, puncture or incinerate container. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

**7.2 Conditions for safe storage, including any incompatibilities****Storage**

- Store in a cool/low-temperature, well-ventilated dry place away from heat and ignition sources. Store only in approved containers. Store locked up. Keep container tightly closed. Containers should be clearly labeled. Keep away from incompatible materials.

**7.3 Specific end use(s)**

- Refer to Section 1.2 - Relevant identified uses.



## Section 8 - Exposure Controls/Personal Protection

### 8.1 Control parameters

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
1,1'-Biphenyl (92-52-4)	TWAs	0.2 ppm TWA	0.2 ppm TWA; 1 mg/m <sup>3</sup> TWA	0.2 ppm TWA; 1 mg/m <sup>3</sup> TWA
Naphthalene (91-20-3)	TWAs	10 ppm TWA	10 ppm TWA; 50 mg/m <sup>3</sup> TWA	10 ppm TWA; 50 mg/m <sup>3</sup> TWA
	STELs	Not established	15 ppm STEL; 75 mg/m <sup>3</sup> STEL	Not established
Benzene, trimethyl- (25551-13-7)	TWAs	25 ppm TWA	Not established	Not established
1,2,4- Trimethylbenzene (95-63-6)	TWAs	Not established	25 ppm TWA; 125 mg/m <sup>3</sup> TWA	Not established
Fuels, diesel, No. 2 (68476-34-6)	TWAs	100 mg/m <sup>3</sup> TWA (inhalable fraction and vapor, as total hydrocarbons, listed under Diesel fuel)	Not established	Not established
Fuel oil, No.2 (68476-30-2)	TWAs	100 mg/m <sup>3</sup> TWA (inhalable fraction and vapor, as total hydrocarbons, listed under Diesel fuel)	Not established	Not established

### 8.2 Exposure controls

#### Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. 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. Use explosion-proof electrical/ventilating/lighting/equipment.

#### Personal Protective Equipment

##### Respiratory

- In case of insufficient ventilation, wear suitable respiratory equipment.

##### Eye/Face

- Wear chemical splash safety goggles.

##### Skin/Body

- Wear appropriate gloves.

#### Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

#### Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

STEL = Short Term Exposure Limits are based on 15-minute exposures

NIOSH = National Institute of Occupational Safety and Health

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

OSHA = Occupational Safety and Health Administration

## Section 9 - Physical and Chemical Properties

### 9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Straw-colored to dyed red liquid with an aromatic (petroleum like) odor.
Color	Straw-colored to dyed red.	Odor	Aromatic Odor (Petroleum Characteristics)

Odor Threshold	Data lacking		
<b>General Properties</b>			
Boiling Point	330 to 380 F(165.5556 to 193.3333 C)	Melting Point/Freezing Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	0.81 to 0.88 Water=1	Density	6.7595 to 7.3436 lbs/gal
Water Solubility	Negligible < 0.1 %	Viscosity	1.9 to 4.1 Centistoke (cSt, cS) or mm <sup>2</sup> /sec
Explosive Properties	Data lacking	Oxidizing Properties:	Data lacking
<b>Volatility</b>			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
<b>Flammability</b>			
Flash Point	125 to 140 F(51.6667 to 60 C)	UEL	10 %
LEL	0.3 %	Autoignition	340 to 500 F(171.1111 to 260 C)
Flammability (solid, gas)	Data lacking		
<b>Environmental</b>			
Octanol/Water Partition coefficient	Data lacking		

## 9.2 Other Information

- No additional physical and chemical parameters noted.

## Section 10: Stability and Reactivity

### 10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

- Stable under normal temperatures and pressures.

### 10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

### 10.4 Conditions to avoid

- Excess heat, sparks, open flame.

### 10.5 Incompatible materials

- Strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc.

### 10.6 Hazardous decomposition products

- The use of hydrocarbon fuels in an area without adequate ventilation may result in hazardous levels of combustion products (e.g., oxides of carbon, sulfur, and nitrogen, benzene and other hydrocarbons) and/or dangerously low oxygen levels.

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

Components	
Fuel oil, No.2 (100%)	68476-30-2 <b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 12 g/kg; Skin-Rabbit LD50 • 4720 µL/kg; <i>Lungs, Thorax, or Respiration:</i> Other changes; <i>Skin and Appendages:</i> After systemic exposure: <b>Dermatitis, other;</b> <b>Irritation:</b> Eye-Rabbit • 100 mg 30 Second(s) • Mild irritation; Skin-Rabbit • 500 µL 24 Hour(s) • Moderate irritation; <b>Tumorigen / Carcinogen:</b> Skin-Mouse TDLo • 243 g/kg 97 Week(s)-Intermittent; <b>Tumorigenic:</b> <b>Carcinogenic by</b>

		<b>RTECS criteria; Skin and Appendages:Other:Tumors</b>
Fuels, diesel, No. 2 (100%)	68476-34-6	<b>Tumorigen / Carcinogen: Skin-Mouse TDLo • 312 mL/kg 78 Week(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Skin and Appendages:Other:Tumors</b>
1,1'-Biphenyl (< 1%)	92-52-4	<b>Acute Toxicity: Ingestion/Oral-Rat LD50 • 2140 mg/kg; Behavioral:Somnolence (general depressed activity); Behavioral:Muscle weakness; Gastrointestinal:Alteration in gastric secretion; Skin-Rabbit LD50 • &gt;5010 mg/kg; Irritation: Eye-Rabbit • 100 mg • Mild irritation; Skin-Rabbit • 500 µL 24 Hour(s) • Severe irritation; Multi-dose Toxicity: Inhalation-Mouse TCLo • 5 mg/m³ 7 Hour(s) 92 Day(s)-Intermittent; Lungs, Thorax, or Respiration:Emphysema; Lungs, Thorax, or Respiration:Chronic pulmonary edema; Related to Chronic: Data:Death in the Other Multiple Dose data type field; Mutagen: DNA damage • Ingestion/Oral-Mouse • 100 mg/kg; Unscheduled DNA synthesis • Ingestion/Oral-Rat • 8400 mg/kg 4 Week(s)-Continuous; Tumorigen / Carcinogen: Ingestion/Oral-Mouse TDLo • 56 g/kg; Tumorigenic:Equivocal tumorigenic agent by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Blood:Tumors</b>
1,2,4-Trimethylbenzene (< 1%)	95-63-6	<b>Acute Toxicity: Ingestion/Oral-Rat LD50 • 5 g/kg; Inhalation-Rat LC50 • 18000 mg/m³ 4 Hour(s); Multi-dose Toxicity: Inhalation-Rat TCLo • 20 mg/m³ 16 Week(s)-Continuous; Kidney, Ureter, and Bladder:Other changes in urine composition; Inhalation-Rat TCLo • 100 ppm 6 Hour(s) 20 Day(s)-Intermittent; Behavioral:Changes in motor activity (specific assay); Behavioral:Analgesia; Behavioral:Alteration of operant conditioning</b>
Benzene, trimethyl- (< 1%)	25551-13-7	<b>Acute Toxicity: Ingestion/Oral-Rat LD50 • 8970 mg/kg; Irritation: Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation</b>
Naphthalene (< 1%)	91-20-3	<b>Acute Toxicity: Ingestion/Oral-Rat LD50 • 490 mg/kg; Ingestion/Oral-Mouse TDLo • 158 mg/kg; Brain and Coverings:Other degenerative changes; Liver:Other changes; Biochemical:Metabolism (intermediary):Lipids, including transport; Inhalation-Human TCLo • 250 mg/m³; Sense Organs and Special Senses:Eye:Lacrimation; Behavioral:Headache; Skin-Rabbit LD50 • &gt;20 g/kg; Unreported-Guinea Pig LD50 • 1200 mg/kg; Behavioral:Somnolence (general depressed activity); Irritation: Skin-Rabbit • 0.05 mL 24 Hour(s) • Severe irritation; Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 500 mg/kg 10 Day(s)-Intermittent; Behavioral:Sleep; Lungs, Thorax, or Respiration:Dyspnea; Ingestion/Oral-Rat TDLo • 4500 mg/kg 10 Day(s)-Intermittent; Brain and Coverings:Other degenerative changes; Mutagen: Specific locus test • Inhalation-Rat • 30 ppm 13 Week(s)-Intermittent; Micronucleus test • Unreported Route-Human • Lymphocyte (Somatic cell) • 30 mg/L; Reproductive: Ingestion/Oral-Mouse TDLo • 2400 mg/kg (7-14D preg); Reproductive Effects:Effects on Newborn:Live birth index; Reproductive Effects:Effects on Newborn:Viability index (e.g., # alive at day 4 per # born alive); Ingestion/Oral-Rat TDLo • 4500 mg/kg (6-15D preg); Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Other developmental abnormalities; Tumorigen / Carcinogen: Inhalation-Mouse TCLo • 30 ppm 6 Hour(s) 2 Year(s)-Intermittent; Tumorigenic:Neoplastic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Inhalation-Rat TCLo • 60 ppm 6 Hour(s) 105 Week(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Sense Organs and Special Senses:Olfaction:Tumors; Inhalation-Rat TCLo • 1575 mg/kg 105 Week(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Sense Organs and Special Senses:Olfaction:Tumors</b>

GHS Properties	Classification
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Serious eye damage/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Eye Irritation 2
Acute toxicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Aspiration Hazard	EU/CLP • Data lacking OSHA HCS 2012 • Aspiration 1

<b>Carcinogenicity</b>	EU/CLP • Carcinogenicity 2 OSHA HCS 2012 • Carcinogenicity 2
<b>Skin corrosion/Irritation</b>	EU/CLP • Data lacking OSHA HCS 2012 • Skin Irritation 2
<b>Skin sensitization</b>	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
<b>STOT-RE</b>	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
<b>STOT-SE</b>	EU/CLP • Data lacking OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
<b>Toxicity for Reproduction</b>	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
<b>Germ Cell Mutagenicity</b>	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking

## Potential Health Effects

### Inhalation

- Acute (Immediate)**
- May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.
- Chronic (Delayed)**
- No data available.

### Skin

- Acute (Immediate)**
- Causes skin irritation.
- Chronic (Delayed)**
- No data available.

### Eye

- Acute (Immediate)**
- Causes serious eye irritation.
- Chronic (Delayed)**
- No data available.

### Ingestion

- Acute (Immediate)**
- Material may be aspirated into lungs during ingestion and/or subsequent vomiting. Aspiration of this material will cause severe lung injury, chemical pneumonitis, pulmonary edema or death.
- Chronic (Delayed)**
- No data available.

### Carcinogenic Effects

- Repeated and prolonged exposure may cause cancer.

<b>Carcinogenic Effects</b>			
	<b>CAS</b>	<b>IARC</b>	<b>NTP</b>
Naphthalene	91-20-3	Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen

#### Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

## Section 12 - Ecological Information

### 12.1 Toxicity

	<b>CAS</b>	
		<b>Aquatic Toxicity-Fish:</b> 96 Hour(s) LC50 <i>Melanotaeni a fluviatilis</i> (Chrimson-Spotted Rainbowfish) 0.213 mg/L Comments: Naphthalene (91-20-3)

Ultra Low Sulfur Diesel	NDA	<p>96 Hour(s) LC50 <i>Pimephales promelas (Fathead Minnow)</i> 7.72 mg/L Comments: 1,2,4-Trimethylbenzene (95-63-6)</p> <p><b>Aquatic Toxicity-Crustacea:</b> 48 Hour(s) EC50 Water Flea <i>Daphnia magna</i> 3.6063 mg/L Comments: 1,2,4-Trimethylbenzene (95-63-6)</p> <p><i>Daggerblade Grass Shrimp</i> 5.6 mg/L Comments: Benzene, trimethyl- (25551-13-7)</p> <p>48 Hour(s) EC50 Water Flea <i>Daphnia magna</i> 136 mg/L Comments: Naphthalene (91-20-3)</p> <p>48 Hour(s) NOEC Water Flea <i>Daphnia magna</i> 1 mg/L Comments: Naphthalene (91-20-3)</p> <p><b>Aquatic Toxicity-Algae and Other Aquatic Plant(s):</b> 7 Day(s) NOEC Algae <i>Scenedesmus subspicatus</i> 4.15 mg/L Comments: Naphthalene (91-20-3)</p>
-------------------------	-----	---

## 12.2 Persistence and degradability

- Material Data Lacking.

## 12.3 Bioaccumulative potential

- Not expected to bioaccumulate through food chains in the environment.

## 12.4 Mobility in Soil

- Spillages may penetrate the soil causing ground water contamination. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

## 12.5 Results of PBT and vPvB assessment

- PBT and vPvB assessment has not been conducted for this material.

## 12.6 Other adverse effects

### Potential Environmental Effects

- Harmful to aquatic life with long lasting effects.

## Section 13 - Disposal Considerations

### 13.1 Waste treatment methods

#### Product waste

- This material, if discarded as produced, would be a RCRA "characteristic" hazardous waste due to the characteristic(s) of ignitability (D001) and benzene (D018). If the material is spilled to soil or water, characteristic testing of the contaminated materials is recommended. Further, this material, once it becomes a waste, is subject to the land disposal restrictions in 40 CFR 268.40 and may require treatment prior to disposal to meet specific standards. Consult state and local regulations to determine whether they are more stringent than the federal requirements.

#### Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Empty drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner.

## Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1993	Flammable liquids, n.o.s.	3	III	NDA
TDG	UN1993	FLAMMABLE LIQUID, N.O.S.	3	III	NDA
IMO/IMDG	UN1993	FLAMMABLE LIQUID, N.O.S.	3	III	NDA
IATA/ICAO	UN1993	Flammable liquids, n.o.s.	3	III	NDA

### 14.6 Special precautions for user

- None specified.

### 14.7 Transport in bulk

- Data lacking.

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

## Section 15 - Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute, Chronic, Fire

Inventory						
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA
1,1'-Biphenyl	92-52-4	Yes	No	Yes	No	Yes
1,2,4-Trimethylbenzene	95-63-6	Yes	No	Yes	No	Yes
Benzene, trimethyl-	25551-13-7	Yes	No	Yes	No	Yes
Fuel oil, No.2	68476-30-2	Yes	No	Yes	No	Yes
Fuels, diesel, No. 2	68476-34-6	Yes	No	Yes	No	Yes
Naphthalene	91-20-3	Yes	No	Yes	No	Yes

## Canada

### Labor

#### Canada - WHMIS - Classifications of Substances

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	D2B
• Naphthalene	91-20-3	B4, D2A
• Benzene, trimethyl-	25551-13-7	B3
• 1,2,4-Trimethylbenzene	95-63-6	B3

#### Canada - WHMIS - Ingredient Disclosure List

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	1 %
• Naphthalene	91-20-3	1 %
• Benzene, trimethyl-	25551-13-7	1 %
• 1,2,4-Trimethylbenzene	95-63-6	0.1 %

### Environment

#### Canada - CEPA - Priority Substances List

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

## Other Agency Information

### Other

#### AIHA - Emergency Response Planning Guidelines - ERPG-1 Values

• Fuels, diesel, No. 2	68476-34-6	Not Listed
------------------------	------------	------------

• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

## United States

### Labor

#### U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

#### U.S. - OSHA - Specifically Regulated Chemicals

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

### Environment

#### U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	
• Naphthalene	91-20-3	
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

#### U.S. - CAA (Clean Air Act) - Accidental Release Prevention - Flammable Substances

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

#### U.S. - CAA (Clean Air Act) - Accidental Release Prevention - Toxic Substances

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

#### U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed

• 1,1'-Biphenyl	92-52-4	100 lb final RQ; 45.4 kg final RQ
• Naphthalene	91-20-3	100 lb final RQ; 45.4 kg final RQ
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

**U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities**

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs**

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs**

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	1.0 % de minimis concentration
• Naphthalene	91-20-3	0.1 % de minimis concentration
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	1.0 % de minimis concentration

**U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing**

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

**United States - California****Environment****U.S. - California - Proposition 65 - Carcinogens List**

• Fuels, diesel, No. 2	68476-34-6	Not Listed
------------------------	------------	------------



• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	carcinogen, initial date 4/19/02
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

**U.S. - California - Proposition 65 - Developmental Toxicity**

• Fuels, diesel, No. 2	68476-84-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

**U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)**

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

**U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)**

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	5.8 µg/day NSRL
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Female**

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Male**

• Fuels, diesel, No. 2	68476-34-6	Not Listed
• Fuel oil, No.2	68476-30-2	Not Listed
• 1,1'-Biphenyl	92-52-4	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

**15.2 Chemical Safety Assessment**

- No Chemical Safety Assessment has been carried out.

**15.3 Other Information**

- **WARNING:** This product contains a chemical known to the State of California to cause cancer.

**Section 16 - Other Information**

**Relevant Phrases (code & full text)**

- H302 - Harmful if swallowed
- H304 - May be fatal if swallowed and enters airways
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H332 - Harmful if inhaled
- H335 - May cause respiratory irritation
- H336 - May cause drowsiness or dizziness
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects
- H411 - Toxic to aquatic life with long lasting effects
- R20 - Harmful by inhalation.
- R22 - Harmful if swallowed.
- R36/37/38 - Irritating to eyes, respiratory system and skin.
- R38 - Irritating to skin.
- R50 - Very toxic to aquatic organisms.
- R51 - Toxic to aquatic organisms.
- R65 - Harmful: may cause lung damage if swallowed.
- R67 - Vapours may cause drowsiness and dizziness.

**Revision Date**

- 04/November/2015

**Preparation Date**

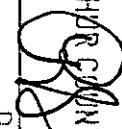
- 06/October/2003

**Disclaimer/Statement of Liability**

- The above data is based on tests and experience which Delek Refining, Ltd believes reliable and is supplied for information purposes only. Delek Refining, Ltd disclaims any liability for damage or injury which results from the use of the above data and nothing contained therein shall constitute a guarantee, warranty (including warranty of merchantability) or representation (including freedom from patent liability) by Delek Refining, Ltd with respect to the data, the product described, to their use for any specific purpose, even if that purpose is known to Delek Refining, Ltd.

**Key to abbreviations**

NDA = No data available

FILED  
TERRI ROSS  
COUNTY CLERK  
2022 JAN 31 AM 11:34  
UPSHUR COUNTY, TX.  
BY   
DEPUTY