



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: ULSD #2 15 MOTOR VEHICLE

Manufacturer Information:

Sunoco, Inc. (R&M)
1735 Market Street LL

Philadelphia, Pennsylvania, 19103-7583

Product Use:

Diesel Fuel 2 (15 ppm Sulfur)

Emergency Phone Numbers:

Chemtrec	(800) 424-9300	24 Hours
Sunoco Inc.	(800) 964-8861	24 Hours

Information:

Product Safety Information (888) 567-3066

2. HAZARDS IDENTIFICATION

• **EMERGENCY OVERVIEW**

Danger! Combustible liquid and vapor. Vapors may cause flash fire or explosion. Static accumulator. May form an ignitable vapor/air mixture. Harmful if inhaled. May cause headaches and dizziness. Harmful if absorbed through skin. Harmful or fatal if swallowed. Pulmonary aspiration hazard. While ingesting or vomiting, may enter lungs and produce damage. Causes skin irritation. Can cause severe chronic toxicity. Possible cancer hazard.

Hazards Ratings:

Key: 0 = least, 1 = slight, 2 = moderate, 3 = high, 4 = extreme

	<u>Health</u>	<u>Fire</u>	<u>Reactivity</u>	<u>PPI</u>
NFPA	1	2	0	
HMIS	2	2	0	x

• **POTENTIAL HEALTH EFFECTS**

▪ **INHALATION**

Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract. May cause headaches and dizziness. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis and loss of consciousness and even death).

▪ **SKIN**

May be absorbed through the skin in harmful amounts. Contains a material that has caused skin tumors in laboratory animals. Causes severe skin irritation. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

▪ **EYES**

Mildly irritating to the eyes.

- **INGESTION**
Harmful or fatal if swallowed. Pulmonary aspiration hazard. While ingesting or vomiting, may enter lungs and produce damage.
- **PRE-EXISTING MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**
The following diseases or disorders may be aggravated by exposure to this product: skin, eye, nervous system, respiratory system, lung (asthma-like conditions),

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount (Vol%)
#2 DIESEL HIGHWAY	68476-34-6	100 - 100
1,2,4 TRIMETHYLBENZENE	95-63-6	0 - 2
NAPHTHALENE	91-20-3	0 - 2
XYLENE	1330-20-7	0 - 1
CUMENE	98-82-8	0 - 1
ETHYL BENZENE	100-41-4	0 - 1

EXPOSURE GUIDELINES (SEE SECTION 15 FOR ADDITIONAL EXPOSURE LIMITS)

	CAS No.	Governing Body	Exposure Limits		
Limit for the product	68476-34-6	ACGIH	TWA	100	mg/m3
CUMENE	98-82-8	ACGIH	TWA	50	ppm
CUMENE	98-82-8	OSHA	TWA	50	ppm
ETHYL BENZENE	100-41-4	ACGIH	TWA	20	ppm
ETHYL BENZENE	100-41-4	OSHA	TWA	100	ppm
NAPHTHALENE	91-20-3	ACGIH	STEL	15	ppm
NAPHTHALENE	91-20-3	ACGIH	TWA	10	ppm
NAPHTHALENE	91-20-3	OSHA	TWA	10	ppm
XYLENE	1330-20-7	ACGIH	STEL	150	ppm
XYLENE	1330-20-7	ACGIH	TWA	100	ppm
XYLENE	1330-20-7	OSHA	TWA	100	ppm
#2 DIESEL HIGHWAY	68476-34-6	ACGIH	TWA	100	mg/m3

4. FIRST AID MEASURES

- **INHALATION**
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and continue to monitor. Get immediate medical attention.
- **SKIN**
Wash with soap and water for 20 minutes. Get medical attention if irritation develops or persists. Following injection, prompt debridement of the wound is necessary to minimize necrosis and tissue loss. Wash clothing before reuse. Destroy contaminated shoes and other leather products.
- **EYES**
Flush eye with water for 20 minutes. Get medical attention.
- **INGESTION**
If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. FIRE FIGHTING MEASURES

- **EXTINGUISHING MEDIA**
Water spray; Regular foam; Dry chemical; Carbon dioxide;

- **FIRE FIGHTING INSTRUCTIONS**

Use water spray to cool fire exposed tanks and containers. Water or foam may cause frothing. Wear structural fire fighting gear. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

- **FLAMMABLE PROPERTIES**

Combustible liquid and vapor. **STATIC ACCUMULATOR.** This liquid may form an ignitable vapor-air mixture in closed tanks or containers.

	Typical	Minimum	Maximum	Text Result	Units	Method
Flash Point				> 125	F	PMCC
Autoignition Temperature	500				F	N/A
Lower Explosion Limit				No data	%	N/A
Upper Explosion Limit				No data	%	N/A

6. ACCIDENTAL RELEASE MEASURES

Prevent ignition, stop leak and ventilate the area. Contain spilled liquid with sand or earth. **DO NOT** use combustible materials such as sawdust. Use appropriate personal protective equipment as stated in Section 8 of this MSDS. Advise the Environmental Protection Agency (EPA) and appropriate state agencies, if required. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Vacuum or sweep up material and place in a disposal container.

7. HANDLING AND STORAGE

- **HANDLING**

Use only in a well-ventilated area. **STATIC ACCUMULATOR.** This liquid may form an ignitable vapor-air mixture in closed tanks or containers. This liquid may accumulate static electricity even when transferred into properly grounded containers. Bonding and grounding may be insufficient to remove static electricity. Static electricity accumulation may be significantly increased by the presence of small quantities of water. Always bond receiving container to the fill pipe before and during loading, following NFPA-77 and/or API RP 2003 requirements. Automatic gauging devices and other floats in vessels or tanks which contain static accumulating liquids should be electrically bonded to the shell. Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards associated with electrostatic charges. In addition to bonding and grounding, efforts to mitigate the hazards of an electrostatic discharge may include, but are not limited to, ventilation, inerting and/or reduction of transfer velocities. Always keep the nozzle in contact with the container throughout the loading process. Do not fill any portable containers in or on a vehicle. Special precautions, such as reduced loading rates and increased monitoring, must be observed during "switch loading" operations (i.e. loading this material in tanks or shipping compartments that previously contained middle distillates or similar products). Non-equilibrium conditions may increase the risks associated with static electricity such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc. Dissipation of electrostatic charges may be improved with the use of conductivity additives when used with other mitigating efforts, including bonding and grounding. Avoid breathing (dust, vapor, mist, gas). Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.

- **STORAGE**

Keep away from heat, sparks, and flame. Keep container closed when not in use. NFPA class II storage. Flash point is greater than 100 degrees F and less than 140 degrees F.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Consult With a Health and Safety Professional for Specific Selections

- **ENGINEERING CONTROLS**

Use with adequate ventilation. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

- **PERSONAL PROTECTION**

- **EYE PROTECTION**

Splash proof chemical goggles are recommended to protect against the splash of product.

- **GLOVES or HAND PROTECTION**

Protective gloves are recommended when prolonged skin contact cannot be avoided. The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection. Polyvinyl chloride (PVC); Neoprene; Nitrile; Polyvinyl alcohol; Viton;

- **RESPIRATORY PROTECTION**

Concentration in air determines the level of respiratory protection needed. Use only NIOSH certified respiratory equipment. Respiratory protection is not usually needed unless product is heated or misted.. Half-mask air purifying respirator with organic vapor cartridges is acceptable for exposures to ten (10) times the exposure limit. Full-face air purifying respirator with organic vapor cartridges is acceptable for exposures to fifty (50) times the exposure limit. Exposure should not exceed the cartridge limit of 1000 ppm. Protection by air purifying respirators is limited. Use a positive pressure-demand full-face supplied air respirator or SCBA for exposures greater than fifty (50) times the exposure limit. If exposure is above the IDLH (Immediately Dangerous to Life and Health) or there is the possibility of an uncontrolled release, or exposure levels are unknown, then use a positive pressure-demand full-face supplied air respirator with escape bottle or SCBA. Wear a NIOSH-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

- **OTHER**

Where splashing is possible, full chemically resistant protective clothing and boots are required. The following materials are acceptable for use as protective clothing: Polyvinyl alcohol (PVA); Polyvinyl chloride (PVC); Neoprene; Nitrile; Viton; Polyurethane; Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Remove contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Property	Typical	Units	Text Result	Reference
Appearance		other	Lt Amber Liquid	
Boiling Point		F		
Bulk Density		lb/gal	No data	
Liquid Conductivity		pS/m	0.1 est	
Melting Point		F	No data	
Molecular Weight		g/mole	No data	
Octanol/Water Coefficient		other	No data	
pH		other	No data	
Specific Gravity	0.87	other		
Solubility In Water		wt %	Nil	
Odor		other	Kerosene-like	
Odor Threshold		other	No data	
Vapor Pressure	1.6	mmHg		
Viscosity (F)		other	No data	
Viscosity (C)	1.9	CsT		
% Volatile		wt %	No data	

10. STABILITY AND REACTIVITY

- **STABILITY**

Stable

- **CONDITIONS TO AVOID**

Avoid heat, sparks and open flame.

- **INCOMPATIBILITY**

Cutting oil Strong oxidizers

- **HAZARDOUS DECOMPOSITION PRODUCTS**

Combustion may produce carbon monoxide, carbon dioxide and other asphyxiants.

- **HAZARDOUS POLYMERIZATION**
Will not polymerize.

11. TOXICOLOGY INFORMATION

Single Exposure Health Effects

Oral:

LD50 (g/kg): No data

Dermal:

LD50 (mg/kg): No data

Inhalation:

LC50 (mg/l): No data

LC50 (mg/m3): No data

LC50 (ppm): No data

Component Toxicity Information

Overexposure to naphthalene, a minor component of this product, may cause skin, eye and respiratory tract irritation, anemia, loss of vision, nervous system effects and kidney and thymus damage. Also, exposure to naphthalene has produced "respiratory tract" tumors in laboratory animals. Ethylbenzene, a component of this product, has been designated by the International Agency for Research on Cancer as "possibly carcinogenic to humans", based on increased tumor incidence in laboratory animals. Overexposure may lead to nervous system effects, including drowsiness, dizziness, nausea, headaches, paralysis, loss of consciousness and even death. Repeated overexposure has caused a hearing loss in laboratory animals. Cumene may be harmful or fatal if swallowed. Pulmonary aspiration hazard. After ingestion, may enter lungs and cause damage. May cause respiratory irritation, fluid in the lungs and lung damage. May be irritating to the skin and eyes. May cause nervous system effects, including drowsiness, dizziness, coma and even death. Overexposure has caused kidney, nose, and liver damage in laboratory animals. Following inhalation exposure, an increased tumor incidence has been observed in experimental animals. The significance of this finding to human health is presently unknown.

Additional Toxicology Information

No data available

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Follow federal, state and local regulations. This material is a RCRA hazardous waste. Do not flush material to drain or storm sewer. Contract to authorized disposal service.

14. TRANSPORT INFORMATION

<u>Governing Body</u>	<u>Mode</u>	<u>Proper Shipping Name</u>
DOT	Ground	Diesel Fuel

<u>Governing Body</u>	<u>Mode</u>	<u>Hazard Class</u>	<u>UN/NA No.</u>	<u>Label</u>
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15. REGULATORY INFORMATION

This product contains the following EPCRA section 313 chemicals subject to the reporting requirements of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372): Maximum Wt%: Naphthalene- CAS Number 91-20-3, 2.5%; %; Ethyl benzene- CAS Number 100-41-4, 1.0%; Cumene- CAS Number 98-82-8, 1.0%; The remaining Sara 313 components listed in Section 14 of the MSDS are less than the reported de minimis levels. This information must be included in all MSDSs that are copied and distributed for this material.

Regulatory List	Component	CAS No.
ACGIH - Occupational Exposure Limits - Carcinogens	ULSD #2 15 MOTOR VEHICLE	68476-34-6
ACGIH - Occupational Exposure Limits - TWAs	ULSD #2 15 MOTOR VEHICLE	68476-34-6
ACGIH - Skin Absorption Designation	ULSD #2 15 MOTOR VEHICLE	68476-34-6
Inventory - Australia (AICS)	ULSD #2 15 MOTOR VEHICLE	68476-34-6
Inventory - Canada - Domestic Substances List	ULSD #2 15 MOTOR VEHICLE	68476-34-6
Inventory - China	ULSD #2 15 MOTOR VEHICLE	68476-34-6
Inventory - European EINECS Inventory	ULSD #2 15 MOTOR VEHICLE	68476-34-6
Inventory - Korea - Existing and Evaluated	ULSD #2 15 MOTOR VEHICLE	68476-34-6
Inventory - New Zealand	ULSD #2 15 MOTOR VEHICLE	68476-34-6
Inventory - Philippines Inventory (PICCS)	ULSD #2 15 MOTOR VEHICLE	68476-34-6
Inventory - TSCA - Sect. 8(b) Inventory	ULSD #2 15 MOTOR VEHICLE	68476-34-6
New Jersey - Department of Health RTK List	ULSD #2 15 MOTOR VEHICLE	68476-34-6
New Jersey - Env Hazardous Substances List	ULSD #2 15 MOTOR VEHICLE	68476-34-6
ACGIH - Occupational Exposure Limits - Carcinogens	#2 DIESEL HIGHWAY	68476-34-6
ACGIH - Occupational Exposure Limits - Carcinogens	ETHYL BENZENE	100-41-4
ACGIH - Occupational Exposure Limits - Carcinogens	NAPHTHALENE	91-20-3
ACGIH - Occupational Exposure Limits - Carcinogens	XYLENE	1330-20-7
ACGIH - Occupational Exposure Limits - TWAs	#2 DIESEL HIGHWAY	68476-34-6
ACGIH - Occupational Exposure Limits - TWAs	CUMENE	98-82-8
ACGIH - Occupational Exposure Limits - TWAs	ETHYL BENZENE	100-41-4
ACGIH - Occupational Exposure Limits - TWAs	NAPHTHALENE	91-20-3
ACGIH - Occupational Exposure Limits - TWAs	XYLENE	1330-20-7
ACGIH - Short Term Exposure Limits	ETHYL BENZENE	100-41-4
ACGIH - Short Term Exposure Limits	NAPHTHALENE	91-20-3
ACGIH - Short Term Exposure Limits	XYLENE	1330-20-7
ACGIH - Skin Absorption Designation	#2 DIESEL HIGHWAY	68476-34-6
ACGIH - Skin Absorption Designation	NAPHTHALENE	91-20-3
CAA (Clean Air Act) - HON Rule - Organic HAPs	CUMENE	98-82-8
CAA (Clean Air Act) - HON Rule - Organic HAPs	ETHYL BENZENE	100-41-4
CAA (Clean Air Act) - HON Rule - Organic HAPs	NAPHTHALENE	91-20-3
CAA (Clean Air Act) - HON Rule - Organic HAPs	XYLENE	1330-20-7
CAA (Clean Air Act) - HON Rule - SOCMi Chemicals	CUMENE	98-82-8
CAA (Clean Air Act) - HON Rule - SOCMi Chemicals	ETHYL BENZENE	100-41-4
CAA (Clean Air Act) - HON Rule - SOCMi Chemicals	NAPHTHALENE	91-20-3
CAA (Clean Air Act) - HON Rule - SOCMi Chemicals	XYLENE	1330-20-7
CAA (Clean Air Act) - VOCs in SOCMi	CUMENE	98-82-8

CAA (Clean Air Act) - VOCs in SOCOMI	ETHYL BENZENE	100-41-4
CAA (Clean Air Act) - VOCs in SOCOMI	XYLENE	1330-20-7
CAA - 1990 Hazardous Air Pollutants	CUMENE	98-82-8
CAA - 1990 Hazardous Air Pollutants	ETHYL BENZENE	100-41-4
CAA - 1990 Hazardous Air Pollutants	NAPHTHALENE	91-20-3
CAA - 1990 Hazardous Air Pollutants	XYLENE	1330-20-7
California - Proposition 65 - Carcinogens List	ETHYL BENZENE	100-41-4
California - Proposition 65 - Carcinogens List	NAPHTHALENE	91-20-3
Canada - WHMIS - Ingredient Disclosure	1,2,4 TRIMETHYLBENZENE	95-63-6
Canada - WHMIS - Ingredient Disclosure	ETHYL BENZENE	100-41-4
CERCLA/SARA - Haz Substances and their RQs	CUMENE	98-82-8
CERCLA/SARA - Haz Substances and their RQs	ETHYL BENZENE	100-41-4
CERCLA/SARA - Haz Substances and their RQs	NAPHTHALENE	91-20-3
CERCLA/SARA - Haz Substances and their RQs	XYLENE	1330-20-7
CERCLA/SARA - Section 313 - Emission Reporting	1,2,4 TRIMETHYLBENZENE	95-63-6
CERCLA/SARA - Section 313 - Emission Reporting	CUMENE	98-82-8
CERCLA/SARA - Section 313 - Emission Reporting	ETHYL BENZENE	100-41-4
CERCLA/SARA - Section 313 - Emission Reporting	NAPHTHALENE	91-20-3
CERCLA/SARA - Section 313 - Emission Reporting	XYLENE	1330-20-7
CWA (Clean Water Act) - Hazardous Substances	ETHYL BENZENE	100-41-4
CWA (Clean Water Act) - Hazardous Substances	NAPHTHALENE	91-20-3
CWA (Clean Water Act) - Hazardous Substances	XYLENE	1330-20-7
CWA (Clean Water Act) - Priority Pollutants	ETHYL BENZENE	100-41-4
CWA (Clean Water Act) - Priority Pollutants	NAPHTHALENE	91-20-3
CWA (Clean Water Act) - Toxic Pollutants	ETHYL BENZENE	100-41-4
CWA (Clean Water Act) - Toxic Pollutants	NAPHTHALENE	91-20-3
IARC - Group 2B (Possibly carcinogenic to humans)	ETHYL BENZENE	100-41-4
IARC - Group 2B (Possibly carcinogenic to humans)	NAPHTHALENE	91-20-3
IARC - Group 3 (not classifiable)	XYLENE	1330-20-7
Inventory - Australia (AICS)	#2 DIESEL HIGHWAY	68476-34-6
Inventory - Australia (AICS)	1,2,4 TRIMETHYLBENZENE	95-63-6
Inventory - Australia (AICS)	CUMENE	98-82-8
Inventory - Australia (AICS)	ETHYL BENZENE	100-41-4
Inventory - Australia (AICS)	NAPHTHALENE	91-20-3
Inventory - Australia (AICS)	XYLENE	1330-20-7
Inventory - Canada - Domestic Substances List	#2 DIESEL HIGHWAY	68476-34-6
Inventory - Canada - Domestic Substances List	1,2,4 TRIMETHYLBENZENE	95-63-6
Inventory - Canada - Domestic Substances List	CUMENE	98-82-8
Inventory - Canada - Domestic Substances List	ETHYL BENZENE	100-41-4
Inventory - Canada - Domestic Substances List	NAPHTHALENE	91-20-3
Inventory - Canada - Domestic Substances List	XYLENE	1330-20-7
Inventory - China	#2 DIESEL HIGHWAY	68476-34-6
Inventory - China	1,2,4 TRIMETHYLBENZENE	95-63-6
Inventory - China	CUMENE	98-82-8
Inventory - China	ETHYL BENZENE	100-41-4
Inventory - China	NAPHTHALENE	91-20-3
Inventory - China	XYLENE	1330-20-7
Inventory - European EINECS Inventory	#2 DIESEL HIGHWAY	68476-34-6
Inventory - European EINECS Inventory	1,2,4 TRIMETHYLBENZENE	95-63-6
Inventory - European EINECS Inventory	CUMENE	98-82-8
Inventory - European EINECS Inventory	ETHYL BENZENE	100-41-4
Inventory - European EINECS Inventory	NAPHTHALENE	91-20-3
Inventory - European EINECS Inventory	XYLENE	1330-20-7
Inventory - Japan - (ENCS)	1,2,4 TRIMETHYLBENZENE	95-63-6
Inventory - Japan - (ENCS)	CUMENE	98-82-8
Inventory - Japan - (ENCS)	ETHYL BENZENE	100-41-4
Inventory - Japan - (ENCS)	NAPHTHALENE	91-20-3
Inventory - Japan - (ENCS)	XYLENE	1330-20-7
Inventory - Korea - Existing and Evaluated	#2 DIESEL HIGHWAY	68476-34-6
Inventory - Korea - Existing and Evaluated	1,2,4 TRIMETHYLBENZENE	95-63-6
Inventory - Korea - Existing and Evaluated	CUMENE	98-82-8
Inventory - Korea - Existing and Evaluated	ETHYL BENZENE	100-41-4

U.S. - DOT - Hazardous Substances and RQs (App A)	ETHYL BENZENE	100-41-4
U.S. - DOT - Hazardous Substances and RQs (App A)	NAPHTHALENE	91-20-3
U.S. - DOT - Hazardous Substances and RQs (App A)	XYLENE	1330-20-7

Title III Classifications Sections 311,312:

- Acute: **YES**
- Chronic: **YES**
- Fire: **YES**
- Reactivity: **NO**
- Sudden Release of Pressure: **NO**

16. OTHER INFORMATION

Follow all MSDS/label precautions even after container is emptied because it may retain product residue. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner or properly disposed of. Email Address: For MSDS requests/information please contact sunocomsds@sunocoinc.com