



Prepared according to 29CFR 1910.1200.

1	Chemical Product and Company Identification
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The Lubrizol Corporation
 29400 Lakeland Boulevard
 Wickliffe, Ohio 44092
 Tel: (440) 943-4200

Product Trade Name ULTRAZOL® 8219CM
CAS Number Not applicable for mixtures.
Synonyms None.
Generic Chemical Name Mixture.
Product Type Gasoline additive.
Preparation/Revision Date 24 June 2009
Transportation Emergency Phone No. FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.)
MSDS No. 27485028-2422266-5024920-102103

2	Hazards Identification
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Appearance Clear light brown liquid.
Odor Hydrocarbon
Principal Hazards Danger.

- Flammable liquid. may create a flash fire hazard.
- Harmful if inhaled.
- Causes skin irritation.
- Causes respiratory tract irritation.
- May be harmful if absorbed through skin.
- May cause eye irritation.
- May cause allergic skin reaction.
- Contains components which may cause cancer.
- May cause chronic health effects.

Target Organs: Blood Central nervous system Heart Kidney Liver

See Section 11 for complete health hazard information.

3	Composition/Information on Ingredients
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Hazardous Ingredients

Comp	CAS No.	Percentage (by wt.)	Carcinogen
Xylene	1330-20-7	28.7%	N/E
Petroleum naphtha	64742-94-5	From 10 to 19.9 percent	N/E
Ethylbenzene	100-41-4	7.2%	IARC Suspect Carcinogen
Polyether amine	Confidential.	From 1 to 4.9 percent	N/E

Naphthalene	91-20-3	1.4%	IARC Suspect Carcinogen NTP Carcinogen
Alkarylamine	Confidential.	From 0.5 to 1.5 percent	N/E

(N/E) - None established

4	First Aid Measures
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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 attention.
Skin	Wash with plenty of soap and water. Immediately remove contaminated clothing. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse and discard leather articles saturated with the material.
Inhalation	Remove exposed person to fresh air. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration. Call a poison center or doctor if you feel unwell.
Oral	DO NOT INDUCE VOMITING. Aspiration of material due to vomiting can cause chemical pneumonitis which can be fatal. Get immediate medical attention. If vomiting occurs naturally, the casualty should lean forward to reduce the risk of aspiration. Do NOT induce vomiting. Immediately call a poison center or doctor.
Additional Information	If exposed or concerned: Get medical attention.

5	Fire Fighting Measures
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Flash Point	37 °C, 98.6 °F PMCC (Typical)
Extinguishing Media	CO ₂ , dry chemical, or foam. Water can be used to cool and protect exposed material.
Firefighting Procedures	Recommend wearing self-contained breathing apparatus. Water may cause splattering.
Unusual Fire & Explosion Hazards	Toxic fumes, gases or vapors may evolve on burning. Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Container may rupture on heating.

6	Accidental Release Measures
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Spill Procedures	May form explosive mixtures with air. Immediately evacuate all personnel from danger area. Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Eliminate all sources of heat, sparks pilot lights, static electricity and open flames. Ventilate spill area. Prevent entry into sewers and waterways, dispose of in accordance with all federal, state and local environmental regulation. Pick up free liquid for recycle and/or disposal if can be accomplished safely with explosion proof equipment. Residual liquid can be absorbed on inert material. Check under Transportation and Labeling (DOT/CERCLA) and Other Regulatory Information Section (SARA) for hazardous substances to determine regulatory reporting requirements for spills.
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7	Handling and Storage
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Pumping Temperature	Ambient
Maximum Handling Temperature	Ambient
Handling Procedures	Keep away from ignition sources such as heat, sparks and open flame. No smoking. Keep containers closed when not in use. Do not discharge into drains or the environment, dispose to an authorized waste collection point. Use appropriate containment to avoid environmental contamination. Avoid breathing dust, fume, gas, mist, vapors or spray. Ground / bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Launder contaminated clothing before reuse. Empty containers retain

material residue. Do not cut, weld, braze, solder, drill, grind or expose containers to heat, flame, spark or other sources of ignition.

Maximum Storage Temperature Ambient

Storage Procedures Do not store near potential sources of ignition. Isolated outside storage is preferred. Inside storage area should be in a flammable liquids cabinet or storage area. Take precautions to avoid release to the environment. Store in a cool, dry, well-ventilated area. Keep container tightly closed.

Loading Temperature Not determined.

8	Exposure Controls/Personal Protection
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Exposure Limits

Comp	Exposure Guidelines					
	OSHA		ACGIH		Other	
	TWA	STEL	TWA	STEL	TWA	STEL
Xylene	100 ppm	N/E	100 ppm	150 ppm	N/E	N/E
Petroleum naphtha	N/E	N/E	N/E	N/E	100 ppm (l)	N/E
Ethylbenzene	100 ppm	N/E	100 ppm	125 ppm	N/E	N/E
Naphthalene	10 ppm	N/E	10 ppm (s)	15 ppm	N/E	N/E

- (s) - Skin exposure
- (p) - Proposed limit
- (c) - Ceiling exposure
- (l) - Recommended exposure limit
- (u) - Supplier recommended exposure limit
- (N/E) - None established

Other Exposure Limits None known.

Engineering Controls Use material in well ventilated area only. Additional ventilation or exhaust may be required to maintain air concentrations below recommended exposure limits. Use explosion proof equipment.

Gloves Procedures Viton. Teflon. Polyvinyl alcohol. Note: polyvinyl alcohol gloves are water soluble and should not be used when there is potential for water contact.

Eye Protection Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.

Respiratory Protection Use NIOSH/MSHA approved full face respirator with a combination organic vapor and high efficiency filter cartridge if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.

Clothing Recommendation Gloves, coveralls, apron, boots as necessary to minimize contact. Wear either a chemical protective suit or apron when potential for contact with material exists. Use chemically protective boots when necessary to avoid contaminating shoes. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. Launder contaminated clothing before reuse.

9	Physical and Chemical Properties
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Flash Point 37 °C, 98.6 °F PMCC (Typical)

Upper Flammable Limit Not determined.

Lower Flammable Limit Not determined.

Autoignition Point Not determined.

Explosion Data	Material does not have explosive properties in the liquid state, but vapors may form explosive mixtures with air.
Vapor Pressure	Not determined.
pH	Not determined.
Specific Gravity	0.9 (15.6 °C)
Bulk Density	Not determined.
Water Solubility	Insoluble.
Percent Solid	Not determined.
Percent Volatile	Not determined.
Volatile Organic Compound	Not determined.
Vapor Density	Not determined.
Evaporation Rate	Not determined.
Odor	Hydrocarbon
Appearance	Clear light brown liquid.
Viscosity	28 Centistokes (0 °C) 11 Centistokes (25 °C) 7.4 Centistokes (40 °C)
Odor Threshold	Not determined.
Boiling Point	137 °C, 278.6 °F(Initial)
Pour Point Temperature	< -57 °C, < -71 °F
Melting / Freezing Point	Not determined.

The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.

10	Stability and Reactivity
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Stability	Material is normally stable at moderately elevated temperatures and pressures.
Decomposition Temperature	Not determined.
Incompatibility	Strong oxidizing agents.
Polymerization	Will not occur.
Thermal Decomposition	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.
Conditions to Avoid	Not determined.

11	Toxicological Information
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-- ACUTE EXPOSURE --

Eye Irritation	Weak to moderate eye irritant. Does not meet EU R36 criteria. Based on data from similar materials.
Skin Irritation	Skin irritant. Based on data from similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.
Respiratory Irritation	Nose, throat and lung irritant. Based on data from components or similar materials. Exposure to a high concentration of vapor or mist is irritating to the respiratory tract.
Dermal Toxicity	The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials. Components of this material may be absorbed through the skin.
Inhalation Toxicity	High concentrations may cause headaches, dizziness, fatigue, nausea, vomiting, drowsiness, stupor, other central nervous system effects leading to visual impairment, respiratory failure, unconsciousness and death. The inhalation toxicity potential of certain components of this

product are not completely understood. As a precaution avoid handling practices that could result in prolonged or repeated inhalation exposure.

- Oral Toxicity** The LD50 in rats is > 5000 mg/Kg. Based on data from components or similar materials. Swallowing this material causes irritation of mouth, esophagus and stomach, with nausea, vomiting, diarrhea and abdominal pain. Ingestion of this material may cause headache, dizziness, uncoordination, and general weakness. Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in severe injury to the lungs and death.
- Dermal Sensitization** May cause skin sensitization. Based on data from similar materials.
- Inhalation Sensitization** No data available to indicate product or components may be respiratory sensitizers.

-- CHRONIC EXPOSURE --

- Chronic Toxicity** Repeated overexposure to petroleum naphtha can cause nervous system damage. Xylene has been found to cause cardiac, liver and kidney effects, anemia and eye damage in laboratory animals. Prolonged and repeated inhalation of hydrocarbon solvents such as xylene can cause chronic neurological disturbances. Chronic exposure to xylene has been shown to cause hearing loss in experimental animals.
- Carcinogenicity** A two-year National Toxicology Program (NTP) study found an increased incidence of tumors of the nose in rats exposed to naphthalene by inhalation. In mice similarly exposed, increased incidences of alveolar/bronchiolar adenomas were observed. Naphthalene has been classified by the International Agency for Research on Cancer (IARC) as a possible human carcinogen (Group 2B) on the basis of sufficient evidence of carcinogenicity in experimental animals but inadequate evidence in exposed humans. A National Toxicology Program (NTP) study found an increased incidence of renal tubule neoplasms in male and female rats exposed to ethylbenzene by inhalation for two years. In male and female mice similarly exposed, increased incidences of alveolar/bronchiolar neoplasms, and hepatocellular neoplasms, respectively, were observed. Ethylbenzene has been classified by IARC as a possible human carcinogen (Group 2B) on the basis of sufficient evidence of carcinogenicity in experimental animals but inadequate evidence in exposed humans.
- Mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
- Reproductive Toxicity** No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.
- Teratogenicity** Xylene is fetotoxic in rats and rabbits in the absence of maternal toxicity. Prolonged and repeated exposure of pregnant animals to toluene by inhalation has been reported to cause adverse fetal developmental effects.

-- ADDITIONAL INFORMATION --

- Other** No other health hazards known.

12	Ecological Information
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-- ENVIRONMENTAL TOXICITY --

- Freshwater Fish Toxicity** The acute LC50 is 1 - 10 mg/L based on component data.
- Freshwater Invertebrates Toxicity** The acute EC50 is 1 - 10 mg/L based on component data.
- Algal Inhibition** The acute EC50 is 1 - 10 mg/L based on component data.
- Saltwater Fish Toxicity** Not determined.
- Saltwater Invertebrates Toxicity** Not determined.
- Bacteria Toxicity** Not determined.
- Miscellaneous Toxicity** Not determined.

-- ENVIRONMENTAL FATE --

Biodegradation	At least 25% of the components in this product show moderate biodegradation based on OECD 302-type test data.
Bioaccumulation	10 – 25% of the components potentially bioconcentrate, based on octanol/water coefficients.
Soil Mobility	Not determined.

13	Disposal Considerations
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Waste Disposal	This material, if discarded, is a hazardous waste under RCRA Regulation 40 CFR 261. Material, if discarded, is expected to be hazardous waste under RCRA due to ignitability (D001). 0.005% Benzene, CAS no. 71-43-2, D018. Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.
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14	Transport Information
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ICAO/IATA I	UN1993 Flammable liquid, n.o.s. (Petroleum naphtha, Xylene), Class 3, PG III
ICAO/IATA II	UN1993 Flammable liquid, n.o.s. (Petroleum naphtha, Xylene), Class 3, PG III
IMDG	UN1993 Flammable liquid, n.o.s. (Petroleum naphtha, Xylene), Class 3, PG III
IMDG EMS Fire	F-E
IMDG EMS Spill	<u>S-E</u>
IMDG MFAG	*Subsection 4.2
MARPOL Annex II	Not determined.
USCG Compatibility	Not determined.
U.S. DOT Bulk	UN1993 Flammable liquid, n.o.s. (Petroleum naphtha, Xylene) Class 3, PG III, RQ (Naphthalene, Xylene)
U.S. DOT Non-Bulk	UN1993 Flammable liquid, n.o.s. (Petroleum naphtha, Xylene) Class 3, PG III
DOT NAERG	128
TDG Bulk	UN1993 Flammable liquid, n.o.s. (Petroleum naphtha, Xylene), Class 3, PG III
TDG Non-Bulk	UN1993 Flammable liquid, n.o.s. (Petroleum naphtha, Xylene), Class 3, PG III
Mexico	UN1993 Flammable liquid, n.o.s. (Petroleum naphtha, Xylene), Class 3, PG III
Mexico Non-Bulk	UN1993 Flammable liquid, n.o.s. (Petroleum naphtha, Xylene), Class 3, PG III
Bulk Quantity	85000 liters, 22457 gal.
Non-Bulk Quantity	207.8 liters, 55 gal.

Review classification requirements before shipping materials at elevated temperatures.

15	Regulatory Information
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-- Global Chemical Inventories --

USA	All components of this material are on the US TSCA Inventory or are exempt.
Other TSCA Reg.	Section 8D (Benzene, ethyl-).Section 4A (Naphthalene).Section 4A (p-xylene).May be subject to export notification under TSCA Section 12(b).
EU	All components are in compliance with the EC Seventh amendment Directive 92 /32/EEC.
Japan	This product requires notification in Japan.
Australia	A component(s) of this product has been notified and assessed under the Industrial Chemicals (Notification and Assessment) Act, 1989. This product may be imported only by Lubrizol Australia.
New Zealand	May require notification before sale under New Zealand regulations.

Canada	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
Switzerland	All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.
Korea	All components are in compliance in Korea.
Philippines	All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
China	All components of this product are listed on the Inventory of Existing Chemical Substances in China.

-- Other U.S. Federal Regulations --

SARA Ext. Haz. Subst.	This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list.
SARA Section 313	28.7% Xylene (mixed isomers), CAS no. 1330-20-7; 7.2% Ethylbenzene, CAS no. 100-41-4; 1.4% Naphthalene, CAS no. 91-20-3

SARA 311 Classifications

Acute Hazard	Yes
Chronic Hazard	Yes
Fire Hazard	Yes
Reactivity Hazard	No

CERCLA Hazardous Substances

Transit Reportable Quantities

Component	Reportable Quantity RQ	Units	Reportable Quantity RQ	Units
Naphthalene	951	gal.	3599	liters
Xylene	1857	gal.	7028	liters

FDA Approval	Not applicable.
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-- State Regulations --

Cal. Prop. 65	This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects: 0.005% Benzene, CAS no. 71-43-2 0.287% Toluene, CAS no. 108-88-3 1.4% Naphthalene, CAS no. 91-20-3 7.2% Ethylbenzene, CAS no. 100-41-4
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-- Product Registrations --

U.S. Fuel Registration	This fuel additive is registered in the United States.
U.S. Dept of Agriculture	This product has not been filed with the USDA to support H2 approvals.
NSF Nonfood Compounds Registration	This product has not been filed with the NSF to support H1 or H2 approvals.
Finnish Registration Number	Not Registered
Swedish Registration Number	Not Registered
Norwegian Registration Number	Not Registered
Danish Registration Number	Not Registered
Swiss Registration Number	Not Registered
Italian Registration Number	Not Registered
Korean Registration Number	Not Registered

-- Other / International --

TDG Regulated Limit. None known.

16	Other Information
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US NFPA Codes

Health	Fire	Reactivity	Special
2	3	0	N/E

(N/E) - None established

HMIS Codes

Health	Fire	Reactivity
2*	3	0

Precautionary Labels

Danger.

- Flammable liquid. may create a flash fire hazard.
- Harmful if inhaled.
- Causes skin irritation.
- Causes respiratory tract irritation.
- May be harmful if absorbed through skin.
- May cause eye irritation.
- May cause allergic skin reaction.
- Contains components which may cause cancer.
- May cause chronic health effects.

Revision Indicators

Section: 2 Principal hazards.	Changed: 24 June 2009
Section: 3 Hazardous ingredients.	Changed: 1 April 2009
Section: 4 Inhalation first aid.	Changed: 29 March 2009
Section: 4 Oral first aid.	Changed: 29 March 2009
Section: 7 Handling procedures.	Changed: 29 March 2009
Section: 7 Storage procedures.	Changed: 29 March 2009
Section: 8 Clothing recommendations.	Changed: 29 March 2009
Section: 8 Hazardous ingredients.	Changed: 1 April 2009
Section: 8 Respiratory protection.	Changed: 31 March 2009
Section: 9 Odor threshold.	Changed: 1 April 2009
Section: 9 Percent volatile.	Changed: 18 February 2009
Section: 11 Carcinogenicity.	Changed: 24 June 2009
Section: 11 Chronic toxicity.	Changed: 31 March 2009
Section: 11 Inhalation toxicity.	Changed: 24 June 2009
Section: 11 Skin irritation.	Changed: 24 June 2009
Section: 11 Teratogenicity.	Changed: 18 February 2009
Section: 13 Waste disposal.	Changed: 24 June 2009
Section: 14 IMDG Code shipping description.	Changed: 29 March 2009
Section: 15 CERCLA hazardous substances.	Changed: 18 February 2009
Section: 15 U.S. Fuel registration.	Changed: 2 September 2008
Section: 16 Principal hazards.	Changed: 24 June 2009

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