Prepared according to Commission Regulation (EU) No 453/2010.

Section 1 Identification of substance/mixture and of the company/undertaking

1.1 Product Identifier

ULTRAZOL® 9013E

Synonyms None.

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

Relevant identified uses (see section 7.3 for information on REACH registered uses)

Gasoline additive.

1.3 Details of the supplier of the safety data sheet

The Lubrizol Corporation
29400 Lakeland Boulevard
Wickliffe, Ohio 44092
Tel: (440) 943-4200

E-mail contact EUSDS@lubrizol.com

1.4 Emergency Telephone number

FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.)

Section 2 Hazards Identification

2.1 Classification of the substance or mixture

(EC) No 1272/2008

Skin Irrit. 2; H315
Eye Irrit. 2; H319
Skin Sens. 1; H317
Carc. 2; H351
Asp. Tox. 1; H304
Aquatic Acute 1; H400
Aquatic Chronic 2; H411

67/548/EC or 1999/45/EC

N
Xn
R36/38
R40
R43
R51/53

For a full text of R- and H- phrases: See section 16

2.2 Label elements

(EC) No 1272/2008

Danger.

Causes skin irritation.
Causes serious eye irritation.
May be fatal if swallowed and enters airways.
May cause an allergic skin reaction.
Suspected of causing cancer.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust / fume / gas / mist / vapours / spray. Wear protective gloves / eye protection / face protection. Contaminated work clothing should not be allowed out of the workplace. Wash thoroughly after handling. Avoid release to the environment.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical 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 attention.

IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.

If exposed or concerned: Get medical attention.

Store locked up. Store away from acids.

All disposal practices must be in accordance with local, national and international regulations.

Supplemental label information

None.

2.3 Other hazards

None identified.

Section 3	Composition/Information on Ingredients

3.2 Mixtures

(EC) No 1272/2008

EC No.	Registration Number	Percentage (by wt.)	Name	Classification
265-198-5	Not Available	From 20 to 29.9 percent	Naphtha (petroleum), heavy aromatic	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 Eye Irrit. 2; H319 Flam. Liq. 3; H226
Polymer	Not Available	From 20 to 29.9 percent	Phenol, (dimethylamino)methyl-, polyisobutylene derivs.	Aquatic Chronic 3; H412
203-234-3	Not Available	From 10 to 19.9 percent	2-Ethylhexanol	Acute Tox. 4; H332 Eye Irrit. 2; H319 Skin Irrit. 2; H315 STOT SE 3; H335
263-177-5	Not Available	From 10 to 19.9 percent	Ethanol, 2,2'-iminobis-, N-tallow alkyl derivatives	Acute Tox. 4; H302 Aquatic Acute 1; H400 Eye Dam. 1; H318 Met. Corr. 1; H290 Skin Corr. 1C; H314 Skin Sens. 1; H317
202-049-5	Not Available	2.6%	Naphthalene	Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Carc. 2; H351 Eye Irrit. 2; H319 Flam. Sol. 2; H228
247-099-9	Not Available	From 0.5 to 1.5 percent	Benzene, trimethyl-	Acute Tox. 4; H302 Acute Tox. 4; H312 Eye Irrit. 2; H319 Flam. Liq. 3; H226
415-880-5	01-0000016281-78	From 0.1 to 0.9 percent	mono[2-(dimethylamino)ethyl] monohydrogen 2-(hexadec-2-enyl) butanedioate and/or mono[2-(dimethylamino)ethyl]monohydrogen 3-(hexadec-2-enyl)butanedioate	Aquatic Chronic 2; H411 Eye Dam. 1; H318 Skin Sens. 1; H317

67/548/EC or 1999/45/EC

EC No.	Registration Number	Percentage (by wt.)	Name	Classification 67/548/EC
265-198-5	Not Available	From 20 to 29.9 percent	Naphtha (petroleum), heavy aromatic	N Xn R36/38 R51/53 R65
Polymer	Not Available	From 20 to 29.9 percent	Phenol, (dimethylamino)methyl-, polyisobutylene derivs.	None. R52/53
203-234-3	Not Available	From 10 to 19.9 percent	2-Ethylhexanol	Xn R20 R36/37/38
263-177-5	Not Available	From 10 to 19.9 percent	Ethanol, 2,2'-iminobis-, N-tallow alkyl derivatives	C N R22 R34 R43 R50
202-049-5	Not Available	2.6%	Naphthalene	N Xn R11 R22 R40 R50/53
247-099-9	Not Available	0.5 to 1.5 percent	Benzene, trimethyl-	Xi R10 R38
415-880-5	01-0000016281-78	From 0.1 to 0.9 percent	mono[2-(dimethylamino)ethyl] monohydrogen 2-(hexadec-2-enyl) butanedioate and/or mono[2-(dimethylamino)ethyl]monohydrogen 3-(hexadec-2-enyl)butanedioate	N Xi R38 R41 R43 R51/53
202-436-9	Not Available	From 0.1 to 0.9 percent	Benzene, 1,2,4-trimethyl-	N Xn R10 R20 R36/37/38 R51/53

Section 4 First Aid Measures

4.1 Description of first aid measures

Skin

Immediately remove contaminated clothing and flush with cool water for at least 15 minutes. Get emergency medical help. Immediately remove contaminated clothing. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse and discard leather articles saturated with the material.

Eyes

Rinse cautiously with water for 20 minutes or until chemical is removed. Remove contact lenses, if present and easy to do. Immediately call a poison center or doctor.

Inhaled

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration. Call a poison center or doctor.

Swallowed

Do NOT induce vomiting. Never give anything by mouth to a person who is losing consciousness, unconscious or convulsing. Rinse mouth and then drink plenty of water, seek medical attention Immediately call a poison center or doctor. Aspiration of material due to vomiting can cause chemical pneumonitis which can be fatal. If vomiting occurs naturally, the casualty should lean forward to reduce the risk of aspiration.

Advice for first-aid providers

When providing first aid always protect yourself against exposure to chemicals or blood born diseases by wearing gloves, masks and eye protection. If providing CPR use mouthpieces, resuscitation bags, pocket masks or other ventilation devices. After providing first aid wash your exposed skin with soap and water.

4.2 Most important symptoms and effects, both acute and delayed

See section 11.

4.3 Indication of any immediate medical attention and special treatment needed

If exposed or concerned: Get medical attention.

Section 5 Fire Fighting Measures

5.1 Extinguishing Media

CO2, dry chemical, foam, water spray, water fog. Water can be used to cool and protect exposed material

5.2 Special hazards arising from substance or mixture

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. Keep material away from from heat, sparks, pilot lights, static electricity and open flame. Vapors may form explosive mixtures with air. If possible, immediately isolate from fire. May explode when heated. Liquid evaporates and forms vapor (fumes) which can catch fire and burn. Prevent static discharge. DO NOT USE a solid stream of water. See section 10 for additional information.

5.3 Advice for firefighters

Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots. Treat as an oil fire. Water may cause splattering. Use water to cool containers exposed to fire. A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. Leaking gas fires: Do not extinguish, unless leak can be stopped safely. If possible, immediately isolate material from fire. Use water with care to avoid possible violent production of steam. In case of fire, evacuate area. Do not release chemically contaminated water into drains, soil or surface water.

Section 6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Only trained personnel should be permitted in area. Personal protective equipment must be worn. Ventilate area if spilled in a confined space or other poorly ventilated area. Eliminate all ignition sources if safe to do so.

6.2 Environmental precautions

Material will float on water. Take precautions to avoid release to the environment. Do not flush into surface water, sanitary sewer or ground water system.

6.3 Methods and material for containment and cleaning up

Use non-sparking tools. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Small spills: contain spilled material. Transfer to secure containers. Where necessary collect using absorbent media. Larger spills: stop spill and dike area to prevent spreading, pump liquid to salvage tank. remaining liquid may be taken up on sand, clay, earth, floor absorbent or other absorbent material and shoveled into containers.

6.4 Reference to other sections

See sections 8 and 13 for additional information.

Section 7 Handling and Storage

7.1 Precautions for safe handling

Keep material away from heat, sparks, pilot lights, static electricity and open flame. Open container in a well ventilated area. Avoid breathing vapors. 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. Vapours are heavier than air and will tend to accumulate in low areas. Avoid use in confined areas without adequate ventilation. Areas of inadequate ventilation could contain concentrations high enough to cause eye irritation, headaches, respiratory discomfort or nausea. Carefully evaluate processes using this product at elevated temperatures to ensure safe operating conditions. Avoid breathing dust, fume, gas, mist, vapors or spray. Electrostatic buildup may occur when pouring or transferring this product from its container. The spark produced may be sufficient to ignite vapors of flammable liquids. Always transfer product by means which avoid static buildup. Avoid pouring product directly from its container into combustible or flammable solvent. Static ignition hazard can result from handling and use. Electrically bond and ground all containers and equipment before transfer or use of material. Keep container tightly closed. Isolate from sources of heat, sparks, and open flame. No sparking tools should be used. Use grounding and bonding connection when transferring material to prevent static discharge, fire and explosion. Use spark-resistant tools. Do not breathe thermal decomposition products. Use only outdoors or in a well-ventilated area. 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. Dispose of packaging or containers in accordance with local, regional, national and international regulations.

Pumping Temperature

Not determined.

Maximum Handling Temperature

Not determined.

Maximum Loading Temperature

Not determined.

7.2 Conditions for safe storage, including any incompatibilites

Keep material away from heat, sparks, pilot lights, static electricity and open flame. Take precautions to avoid release to the environment. Store in a well-ventilated place. Keep cool. Do not store or handle in aluminum equipment at temperatures over 120 deg F (49 deg C). Store at a temperature between 34 deg F and 120 deg F (between 1 deg C and 49 deg C). Store in containers made of same material as original container. Shelf life is two (2) years. Do not store near alkalis. Do not store near acids. Store locked up. See section 10 for incompatible materials.

Maximum Storage Temperature

Not determined.

7.3 Specific end use(s)

End uses are listed in an attached exposure scenario when one is required.

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters

Country	Substance	Long Term (8 Hours T.W.A.)	Short Term (15 mins.)
Austria	2-Ethylhexanol	50 ppm (s)	100 ppm
Austria	Trimethyl benzene	20 ppm	30 ppm
Austria	Naphthalene	10 ppm (s)	N/E
Austria	Benzene, 1,2,4-trimethyl-	20 ppm	30 ppm
Belgium	Trimethyl benzene	100 mg/cu. M	N/E
Cyprus	Naphthalene	10 ppm	N/E
Cyprus	1,2,4-Trimethylbenzene	20 ppm	N/E
Czech Republic	Naphthalene	50 mg/cu. M	100 mg/cu. M (c)
Czech Republic	Benzene, 1,2,4-trimethyl-	100 mg/cu. M	250 mg/cu. M (c)
Denmark	Trimethyl benzene	25 ppm	N/E
Denmark	Naphthalene	10 ppm	N/E
Denmark	Benzene, 1,2,4-trimethyl-	20 ppm	N/E
EU	Naphthalene	10 ppm	N/E
EU	Benzene, 1,2,4-trimethyl-	20 ppm	N/E
Estonia	Trimethyl benzene	20 ppm	N/E
Estonia	Naphthalene	10 ppm	N/E
Estonia	Benzene, 1,2,4-trimethyl-	20 ppm	N/E
Finland	Trimethyl benzene	20 ppm	N/E
Finland	Naphthalene	1 ppm	2 ppm
Finland	Benzene, 1,2,4-trimethyl-	20 ppm	N/E
France	Naphthalene	10 ppm	N/E
France	Benzene, 1,2,4-trimethyl-	20 ppm	50 ppm
Greece	Naphthalene	10 ppm	N/E
Greece	1,2,4-Trimethylbenzene	25 ppm	N/E
Hungary	Naphthalene	50 mg/cu. M	N/E
Hungary	Benzene, 1,2,4-trimethyl-	100 mg/cu. M	N/E
Ireland	Trimethylbenzene, all isomers	20 ppm (s)	N/E
Ireland	Naphthalene	10 ppm	15 ppm
Ireland	Benzene, 1,2,4-trimethyl-	20 ppm	N/E
Italy	Benzene, 1,2,4-trimethyl-	20 ppm	N/E
Netherlands	Trimethyl benzene	N/E	40 ppm
Netherlands	Naphthalene	N/E	80 mg/cu. M

Netherlands	Benzene, 1,2,4-trimethyl-	N/E	40 ppm
Norway	Trimethyl benzene	20 ppm	N/E
Poland	2-Ethylhexanol	160 mg/cu. M	320 mg/cu. M
Poland	Trimethyl benzene	100 mg/cu. M	170 mg/cu. M
Poland	Naphthalene	20 mg/cu. M	50 mg/cu. M
Poland	Benzene, 1,2,4-trimethyl-	100 mg/cu. M	170 mg/cu. M
Portugal	Trimethyl benzene	25 ppm	N/E
Portugal	Naphthalene	10 ppm	15 ppm
Slovenia	Naphthalene	10 ppm	N/E
Slovenia	Benzene, 1,2,4-trimethyl-	20 ppm	N/E
Slovak Republic	Naphthalene	10 ppm	N/E
Slovak Republic	Benzene, 1,2,4-trimethyl-	20 ppm	200 mg/cu. M (c)
Spain	Naphthalene	10 ppm	15 ppm
Spain	Benzene, 1,2,4-trimethyl-	20 ppm	N/E
Sweden	Trimethyl benzene	25 ppm	35 ppm
Sweden	Naphthalene	10 ppm	15 ppm
Sweden	Benzene, 1,2,4-trimethyl-	25 ppm	35 ppm
Switzerland	2-Ethylhexanol	20 ppm	20 ppm
Switzerland	Trimethyl benzene	20 ppm	40 ppm
Switzerland	Naphthalene	10 ppm	N/E
Germany (TRGS 900)	2-Ethylhexanol	20 ppm	N/E
Germany (TRGS 900)	Naphthalene	0.10 ppm (s)	N/E
Germany (TRGS 900)	Benzene, 1,2,4-trimethyl-	20 ppm	N/E
UK	Trimethylbenzenes, all isomers or mixtures	25 ppm	75 ppm

Other Exposure Limits

None known.

8.2 Exposure controls

Use local exhaust ventilation to control mists or vapors. Additional ventilation or exhaust may be required to maintain air concentrations below recommended exposure limits. Use explosion proof equipment.

Eye/face protection

Chemical goggles or faceshield.

Skin protection

Natural Rubber. Polyvinyl chloride. Viton. Nitrile. Polyvinyl alcohol. Note: polyvinyl alcohol gloves are water soluble and should not be used when there is potential for water contact. Recommended order of use: 4H, Butyl, Neoprene, Nitrile, PVC-coated. Gloves should always be inspected before each use and discarded if they show tears, pinholes, or signs of wear.

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 neoprene or nitrile rubber 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.

Respiratory Protection

Use full face respirator with an organic vapor 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.

Hygiene Measures

Wash thoroughly after handling this product.

Environmental exposure controls

See section 6 for details.

Section 9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Amber liquid.
Odour	Mild
Odour Threshold	Not determined.
pH	Not determined.
Melting / Freezing Point	Not determined.
Boiling Point	Not determined.
Boiling Point Range	Not determined.
Flash Point	75 °C, 167 °F PMCC (Typical)
Evaporation Rate	Not determined.
Flammability (solid,gas)	Not applicable.
Lower flammability or explosive limit	Not determined.
Upper flammability or explosive limit	Not determined.

Vapour Pressure	Not determined.
Vapour Density	Not determined.
Relative density	0.91 (15.6 °C)
Bulk Density	Not determined.
Water Solubility	Insoluble.
Other solubilities	Not determined.
Partition coefficient: n-octanol/water	Not determined.
Autoignition Point	Not determined.
Decomposition Temperature	Not determined.
Viscosity	38 Centistokes (25 °C) 20 Centistokes (40 °C)
Explosive properties	Material does not have explosive properties.
Oxidising properties	Material is a non-oxidising substance.

9.2 Other information

Pour Point Temperature	< -40 °C, < -40 °F

The above data are typical values and do not constitute a specification.

Section 10 Stability and Reactivity

10.1 Reactivity

Carefully review all information provided in sections 10.2 - 10.6.

10.2 Chemical stability

Material is normally stable at moderately elevated temperatures and pressures.

10.3 Possibility of hazardous reactions

Will not occur.

10.4 Conditions to avoid

Do not expose to excessive heat, ignition sources, or oxidizing materials. Elevated temperatures. Contact with strong oxidizers. Contact with strong caustic agents. Acids.

10.5 Incompatible materials

Material is a strong base. Strong bases will react with some metals to form salts. Strong acids. Strong alkalis. Strong oxidizing agents.

10.6 Hazardous decomposition products

Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

Section 11 Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

Oral

The LD50 in rats is 2000 – 5000 mg/Kg. Based on data from components or similar materials. Swallowing this material can cause burns to the mouth and esophagus. Asphyxiation can occur from swelling of the throat. Perforation of the esophagus and stomach can occur.

Dermal

The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials.

Inhalation

The LC50 (4 hr.) in rats for dust or mist of this material is 5.0 - 50 mg/l. Based on data from components or similar materials. High concentrations may cause headaches, dizziness, nausea, stupor, and other central nervous system effects leading to visual impairment, difficulty breathing and convulsions.

Percentage of the mixture with unknown inhalation toxicity: 10 – 19.9%

	Percentage (by wt.)	LC50 (4 Hr.)	Form
2-Ethylhexanol	From 10 to 19.9 percent	2.7mg/l	Particulate/Mist

Skin corrosion / irritation

Severe 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.

Serious eye damage / irritation

Moderate to strong eye irritant. Based on data from similar materials.

Respiratory Irritation

Nose, throat and lung irritant. Based on data from similar materials. Exposure to a high concentration of vapor or mist is irritating to the respiratory tract.

Respiratory or skin sensitization

Skin

May cause skin sensitization. Based on data from similar materials.

Respiratory

No data available to indicate product or components may be respiratory sensitizers.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

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.

Reproductive Toxicity

No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

No evidence of adverse effects were found in a developmental toxicity study of 2-ethylhexanol in rats. Doses up to 3 ml/kg applied to the skin during the most critical part of the gestation period produced evidence of toxicity to mothers, but no evidence of injury in the developing offspring. In a previous study, birth defects were observed by oral administration, an unlikely route of exposure in the workplace.

STOT repeated exposure

Repeated overexposure to petroleum naphtha can cause nervous system damage. A 14-day dermal toxicity study of 2-ethylhexanol in rats showed blood effects, decreased spleen weight and decreased triglycerides. Repeated overexposure to naphthalene may cause destruction of red blood cells with anemia, fever, jaundice and kidney and liver damage. Repeated ingestion of 2-ethylhexanol may cause injury to the liver and kidneys.

Other information

Spilled material is slippery.

Section 12 Ecological Information

12.1 Toxicity

Freshwater fish

The acute LC50 is 1 - 10 mg/L based on component data.

Freshwater invertebrates

The acute EC50 is 1 - 10 mg/L based on component data.

Algae

The acute EC50 is < 1 mg/L based on component data. The Ethoxylated amine contained in this product has an EC50 between 0.01 and 0.1 mg/L.

Saltwater fish

Not determined.

Saltwater invertebrates

Not determined.

Bacteria

Not determined.

12.2 Persistence and degradability

Substance	Pct. (weight)	Test type	Duration (days)	Pct. degradation
Naphtha (petroleum), heavy aromatic	From 20 to 29.9 percent	Manometric Respirometry	28	58
Phenol, (dimethylamino)methyl-, polyisobutylene derivs.	From 20 to 29.9 percent	Inherent/Sludge	28	20.7

12.3 Bioaccumulative potential

Substance	Pct. (weight)	Test type	Duration (days)	Log Kow or BCF
Naphtha (petroleum), heavy aromatic	From 20 to 29.9 percent	Octanol-Water Coefficient	0.1	3.1

12.4 Mobility in soil

Not applicable.

12.5 Results of PBT and vPvB assessment

Not Available

12.6 Other adverse effects

None known.

Section 13 Disposal Considerations

13.1 Waste treatment methods

All disposal practices must be in accordance with local, regional, national and international regulations. Do not dispose in landfill.

Empty container retains product residue and can be hazardous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat, flame, sparks, static electricity, or other sources of ignition. Dispose of packaging or containers in accordance with local, regional, national and international regulations.

Section 14	Transport Information

14.1 UN number

ADR/RID	UN3082
ICAO	UN3082
IMDG	UN3082

14.2 UN proper shipping name

ADR/RID	Environmentally hazardous substance, liquid, n.o.s.(Petroleum naphtha)
ICAO	Environmentally hazardous substance, liquid, n.o.s.(Petroleum naphtha)
IMDG	Environmentally hazardous substance, liquid, n.o.s.(Petroleum naphtha)

14.3 Transport hazard class(es)

ADR/RID	9
ICAO	9
IMDG	9

14.4 Packing group

ADR/RID	III
ICAO	III
IMDG	III

14.5 Environmental hazards

ADR/RID	Aquatic Pollutant(Petroleum naphtha)
ICAO	Marine Pollutant(Petroleum naphtha)
IMDG	Marine Pollutant(Petroleum naphtha)

14.6 Special precautions for users

Review classification requirements before shipping materials at elevated temperatures.

14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC code

Not determined.

Section 15	Regulatory Information

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

Global Chemical Inventories

Australia	This product requires notification before sale in Australia.
Canada	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
China	All components of this product are listed on the Inventory of Existing Chemical Substances in China.
EU	All components comply with the EU 7th Amendment and are approved for EU sales. Lubrizol must maintain records of all imports of this product into the EU. Third party importers are asked to report every import to The Lubrizol PSCD Manager (Europe), Hazelwood,Derby DE56 1QN, UK.
Japan	This product requires notification in Japan.
Korea	This product requires notification before sale in Korea.
New Zealand	May require notification before sale under New Zealand regulations.
Philippines	This product requires notification before sale in the Philippines.
Switzerland	This product requires notification before sale in Switzerland.
Taiwan	May require notification before sale in Taiwan.
USA	All components of this material are on the US TSCA Inventory or are exempt.

German water hazard classes

WGK = 2 according to the Water Hazardous Directive, VwVwS, dated May 17, 1999.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

Section 16	Other Information

Created by

Product Safety and Compliance Department (440-943-1200)

Created Date

17 November 2003

Revision date

26 January 2012

SDS No.

11397581-1321891-5026221-102103

HMIS Codes

Health	Fire	Reactivity
2*	2	0

Relevant R Phrases

R10 -- Flammable.
R11 -- Highly flammable.
R20 -- Harmful by inhalation.
R22 -- Harmful if swallowed.
R34 -- Causes burns.
R36/37/38 -- Irritating to eyes, respiratory system and skin.
R36/38 -- Irritating to eyes and skin.
R38 -- Irritating to skin.
R40 -- Limited evidence of a carcinogenic effect.
R41 -- Risk of serious damage to eye.
R43 -- May cause sensitisation by skin contact.
R50 -- Very toxic to aquatic organisms
R50/53 -- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 -- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 -- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 -- Harmful: may cause lung damage if swallowed.

Relevant hazard phrases

H226 - Flammable liquid and vapor.
H228 - Flammable solid.
H290 - May be corrosive to metals.
H302 - Harmful if swallowed.
H304 - May be fatal if swallowed and enters airways.
H312 - Harmful in contact with skin.
H314 - Causes severe skin burns and eye damage.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.
H335 - May cause respiratory irritation.
H351 - Suspected of causing cancer.
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.
H412 - Harmful to aquatic life with long lasting effects.

Revision Indicators

Section: 2 CLP Hazard Class	Changed: 4 August 2011
Section: 2 CLP Hazard statements	Changed: 4 August 2011
Section: 2 GHS Prevention statement(s)	Changed: 4 August 2011
Section: 2 General	Changed: 26 February 2011
Section: 2 Disposal	Changed: 9 July 2011
Section: 2 Extinguishing media.	Changed: 26 February 2011
Section: 2 Oral first aid.	Changed: 26 February 2011
Section: 2 Skin first aid.	Changed: 26 February 2011
Section: 2 Storage procedures.	Changed: 4 August 2011
Section: 4 Advide to first aide provider.	Changed: 26 February 2011
Section: 4 Eyes first aid.	Changed: 29 July 2011
Section: 4 Inhalation first aid.	Changed: 4 August 2011
Section: 4 Oral first aid.	Changed: 29 July 2011
Section: 4 Skin first aid.	Changed: 29 July 2011
Section: 5 Extinguishing media.	Changed: 29 July 2011
Section: 5 Special firefighting procedures.	Changed: 29 July 2011
Section: 5 Unusual fire& explosion hazards.	Changed: 1 August 2011
Section: 6 Environmental precautions	Changed: 29 July 2011
Section: 6 Methods for clean-up, removal	Changed: 29 July 2011
Section: 6 Personal precaution	Changed: 29 July 2011
Section: 7 Handling procedures.	Changed: 29 July 2011
Section: 7 Storage procedures.	Changed: 4 August 2011
Section: 8 Glove protection.	Changed: 29 July 2011
Section: 8 Ventilation procedures.	Changed: 29 July 2011
Section: 10 Conditions to avoid.	Changed: 29 July 2011
Section: 11 Dermal toxicity.	Changed: 29 July 2011

Section: 11 Eye irritation.	Changed: 29 July 2011
Section: 11 Inhalation toxicity.	Changed: 29 July 2011
Section: 11 Inhalation toxicity.	Changed: 29 July 2011
Section: 11 Oral toxicity.	Changed: 29 July 2011
Section: 11 Respiratory irritation.	Changed: 4 August 2011
Section: 16 Relevant hazard phrases	Changed: 29 July 2011
Section: 16 HMIS codes.	Changed: 1 August 2011