SAFETY DATA SHEET

1. Identification

Identification

Product name: **ULTRAZOL® 8219CA**

Additional identification

Chemical name: Mixture

Recommended use and restriction on use

Recommended use: Gasoline additive
Restrictions on use: None identified.

Details of the supplier of the safety data sheet

Supplier

Company Name: THE LUBRIZOL CORPORATION
Address: 29400 LAKELAND BOULEVARD
WICKLIFFE, OH 44092-2298
US
Telephone: (440)943-1200

Emergency telephone number:
FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1)703 527 3887, OR WITHIN USA 800 424 9300

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids	Category 3

Health Hazards

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Carcinogenicity	Category 2
Toxic to reproduction	Category 2
Specific Target Organ Toxicity - Single Exposure	Category 3
Aspiration Hazard	Category 1

Unknown toxicity

Acute toxicity, oral	0.0 %
Acute toxicity, dermal	0.0 %
Acute toxicity, inhalation, vapor	0.0 %
Acute toxicity, inhalation, dust or mist	3.0 %

Label Elements:

Hazard Symbol:

Signal Word: Danger

Hazard Statement:

Flammable liquid and vapor.
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.
May cause respiratory irritation.
May be fatal if swallowed and enters airways.

Precautionary Statements:

Prevention:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting/…] equipment. Use non-sparking tools. Take action to prevent static discharges. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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 ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation occurs: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see on this label). Take off contaminated clothing. In case of fire: Use CO2, dry chemical or foam to extinguish. Water can be used to cool and protect exposed material.

Storage:

Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.

Disposal:

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification: Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

3. Composition/information on ingredients

Chemical name	CAS number	Percent by Weight
Xylene	1330-20-7	20 - 30%
Petroleum naphtha	64742-94-5	10 - 20%
Petroleum naphtha	64742-94-5	5 - 10%
Polyether amine	Confidential	1 - 5%
Toluene	108-88-3	0.1 - 0.5%
++ Ethyl benzene	100-41-4	5 - 10%
++ Naphthalene	91-20-3	0.5 - 1%

++ The listed components are subcomponents of the hazardous ingredients listed above.

Trade secret information: A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

General information: IF exposed or concerned: Get medical advice/attention.

Ingestion: Do NOT induce vomiting. 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. Rinse mouth. Immediately call a POISON CENTER/doctor.

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact: Take off immediately all contaminated clothing. Take off contaminated clothing and wash before re-use. Wash skin thoroughly with soap and water. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse.

Eye contact: 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.

Most important symptoms/effects, acute and delayed

Symptoms: Symptoms may be delayed. See section 11.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: CO_2, Dry chemical or Foam. Water can be used to cool and protect exposed material.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations. Vapors may travel considerable distance to a source of ignition and flash back. Water may cause splattering. Container may rupture on heating. A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. See section 10 for additional information.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep upwind. Keep unauthorized personnel away. See Section 8 of the SDS for Personal Protective Equipment.

Methods and material for containment and cleaning up: In case of leakage, eliminate all ignition sources. Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.

Environmental Precautions: Avoid release to the environment. Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling:	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Ground and bond container and receiving equipment. Use non-sparking tools. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Avoid contact with eyes. Observe good industrial hygiene practices. Use only in well-ventilated areas. Use personal protective equipment as required. Wash hands thoroughly after handling. Launder contaminated clothing before reuse. Avoid environmental contamination.
Maximum Handling Temperature:	Not determined.
Conditions for safe storage, including any incompatibilities:	Keep container tightly closed. Keep cool. Store in a well-ventilated place. Store away from incompatible materials. See section 10 for incompatible materials. Do not store near potential sources of ignition.
Maximum Storage Temperature:	Not determined.

8. Exposure controls/personal protection

Control Parameters:

Occupational Exposure Limits

Chemical name	Type	Exposure Limit Values		Source
Xylene	TWA	100 ppm		US. ACGIH Threshold Limit Values (02 2012)
Xylene	STEL	150 ppm		US. ACGIH Threshold Limit Values (02 2012)
Xylene	STEL	150 ppm	655 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2016)
Xylene	REL	100 ppm	435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2016)
Xylene	PEL	100 ppm	435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Petroleum naphtha - Non-aerosol. - as total hydrocarbon vapor	TWA		200 mg/m3	US. ACGIH Threshold Limit Values (03 2014)
Petroleum naphtha	REL	100 ppm	400 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
Petroleum naphtha	REL		100 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
Petroleum naphtha	PEL	100 ppm	400 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Petroleum naphtha	TWA	100 ppm	400 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Petroleum naphtha - Non-aerosol. - as total hydrocarbon vapor	TWA		200 mg/m3	US. ACGIH Threshold Limit Values (03 2014)
Petroleum naphtha	REL	100 ppm	400 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
Petroleum naphtha	REL		100 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
Petroleum naphtha	PEL	100 ppm	400 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Petroleum naphtha	TWA	100 ppm	400 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
++ Ethyl benzene	TWA	20 ppm		US. ACGIH Threshold Limit Values (02 2012)
++ Ethyl benzene	REL	100 ppm	435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
++ Ethyl benzene	STEL	125 ppm	545 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
++ Ethyl benzene	PEL	100 ppm	435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
++ Ethyl benzene	STEL	125 ppm	545 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
++ Naphthalene	TWA	10 ppm		US. ACGIH Threshold Limit Values (02 2012)
++ Naphthalene	STEL	15 ppm	75 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
++ Naphthalene	REL	10 ppm	50 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
++ Naphthalene	PEL	10 ppm	50 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Toluene	TWA	20 ppm		US. ACGIH Threshold Limit Values (02 2012)
Toluene	STEL	150 ppm	560 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
Toluene	REL	100 ppm	375 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
Toluene	TWA	200 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
Toluene	Ceiling	300 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
Toluene	MAX. CONC	500 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)

Biological Limit Values

Chemical name	Exposure Limit Values	Source
Xylene (Methylhippuric acids: Sampling time: End of shift.)	1.5 g/g (Creatinine in urine)	ACGIH BEI (03 2013)
++ Ethyl benzene (Sum of mandelic acid and phenylglyoxylic acid: Sampling time: End of shift.)	0.15 g/g (Creatinine in urine)	ACGIH BEI (02 2014)
Toluene (o-Cresol, with hydrolysis: Sampling time: End of shift.)	0.3 mg/g (Creatinine in urine)	ACGIH BEI (03 2013)
Toluene (toluene: Sampling time: Prior to last shift of work week.)	0.02 mg/l (Blood)	ACGIH BEI (03 2013)
Toluene (toluene: Sampling time: End of shift.)	0.03 mg/l (Urine)	ACGIH BEI (03 2013)

Appropriate engineering controls: Use explosion-proof ventilation equipment to stay below exposure limits. Material should be handled in enclosed vessels and equipment, in which case general (mechanical) room ventilation should be sufficient. Local exhaust ventilation should be used at points where dust, mist, vapors or gases can escape into the room air.

Individual protection measures, such as personal protective equipment

General information: Use explosion-proof ventilation equipment. Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) 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/face protection: Wear tight-fitting goggles or face shield.

Skin Protection

Hand Protection: Use nitrile or neoprene gloves. Use good industrial hygiene practices. In case of skin contact, wash hands and arms with soap and water. Polyvinyl alcohol. Note: polyvinyl alcohol gloves are water soluble and should not be used when there is potential for water contact.

Other: Wear apron or protective clothing in case of contact. Do not wear rings, watches or similar apparel that could entrap the material.

Respiratory Protection: A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Use respirator with an organic vapor and dust/mist 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:	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Observe good industrial hygiene practices. Avoid contact with skin. Avoid contact with eyes. Wash contaminated clothing before reuse. When using do not smoke. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Appearance	
Physical state:	liquid
Form:	liquid
Color:	Amber
Odor:	Mild
Odor threshold:	No data available.
pH:	No data available.
Freezing point:	No data available.
Boiling Point:	> 279 °F (137 °C)
Flash Point:	93 °F (34 °C) (Pensky-Martens Closed Cup)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	0.1593 PSI (37.8 °C 100.0 °F)
Vapor density:	No data available.
Relative density:	0.887 - 0.927 60.1 °F (15.6 °C)
Solubility(ies)	
Solubility in water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	17.5 mm2/s (104 °F (40 °C)) 25 mm2/s (25 °C (77 °F))
Other information	
Pour Point Temperature:	< -40 °F (-40 °C)

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Will not occur.

Conditions to avoid:	Do not expose to excessive heat, ignition sources, or oxidizing materials. Heat, sparks, flames.
Incompatible Materials:	Strong acids. Reducing agents. Strong oxidizing agents. Strong alkalis. Strong reducing agents. Contact with acids.
Hazardous Decomposition Products:	Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide , nitrogen oxides, and other products of incomplete combustion.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	Causes skin irritation.
Eye contact:	Causes serious eye irritation.

Information on toxicological effects

Acute toxicity

Oral

Product**:** Ingestion can cause central nervous system effects such as headache, dizziness, drowsiness, and generalized weakness. Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain. 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. Swallowing this material causes irritation of mouth, esophagus and stomach, with nausea, vomiting, diarrhea and abdominal pain.
ATEmix > 10,000 mg/kg.

Dermal

Product**:** Components of this material may be absorbed through the skin.
Not classified for acute toxicity based on available data.

Inhalation

Product**:** ATEmix (, 4 h): > 20 mg/l. Vapour
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 LC50 in rat (4 hr) for xylene is 6,700 ppm. Repeated overexposure to petroleum naphtha can cause nervous system damage. High concentrations may cause headaches, dizziness, weakness, and nausea.

Skin Corrosion/Irritation:

Product**:** Classification: Irritating. Rabbit.
Remarks: Causes skin irritation.
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/Eye Irritation:

Product**:**	Classification: Strongly irritating. Rabbit. Remarks: Causes serious eye irritation.

Respiratory sensitization:

No data available

Skin sensitization:

Xylene	(Literature) Not a skin sensitizer.
Petroleum naphtha	Classification: Not a skin sensitizer. (Literature)
Polyether amine	Classification: Not a skin sensitizer. (Read across) Not a skin sensitizer.
Toluene	(Literature) Not a skin sensitizer.

Specific Target Organ Toxicity - Single Exposure:

Xylene	May cause respiratory irritation.
Petroleum naphtha	If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.
++ Ethyl benzene	Nose, throat and lung irritant.
Polyether amine	Nose, throat and lung irritant.
Toluene	Narcotic effect.
Toluene	Nose, throat and lung irritant.

Aspiration Hazard:

Product**:**	May be fatal if swallowed and enters airways.

Other effects:

Petroleum naphtha	May cause drowsiness or dizziness.
Petroleum naphtha	Narcotic effect.
++ Ethyl benzene	Central nervous system
++ Naphthalene	Blood
Toluene	Central nervous system

Chronic Effects

Carcinogenicity:

Product**:**	Not available.

++ Ethyl benzene	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.
++ Naphthalene	A two-year National Toxicology Program (NTP) study found an increased incidence of nasal tumors in rats exposed to naphthalene by inhalation. In mice similarly exposed, increased incidences of alveolar/bronchiolar adenomas were observed.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

++ Ethyl benzene	Overall evaluation: 2B. Possibly carcinogenic to humans.
++ Naphthalene	Overall evaluation: 2B. Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens:

++ Naphthalene	Reasonably Anticipated to be a Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity:

Xylene	This material has not exhibited mutagenic or genotoxic potential in laboratory tests.
++ Ethyl benzene	In vitro and in vivo genetic toxicity studies were negative.
++ Naphthalene	Naphthalene has caused mutagenic effects in in vitro studies with metabolic activation, however, in vivo studies do not show evidence of germ cell mutagenicity.
Toluene	In vitro and in vivo genetic toxicity studies were negative. Results of tests in workers exposed to higher concentrations of toluene have shown that this material can cause irreversible changes in the genetic material (DNA) of a cell. The human health consequences of these changes is not fully understood.

Reproductive toxicity:

Xylene	Not Classified based on available data. Based on available data this product is not expected to be classified a reproductive hazard. Xylene is fetotoxic in rats and rabbits in the absence of maternal toxicity.
++ Ethyl benzene	Not Classified based on available data. Based on available data this product is not expected to be classified a reproductive hazard.
Toluene	Prolonged and repeated exposure of pregnant animals to toluene by inhalation has been reported to cause adverse fetal developmental effects.

Specific Target Organ Toxicity - Repeated Exposure:

Xylene	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. Unknown: Target Organ(s): Central nervous system., Hearing
Petroleum naphtha	Repeated overexposure to petroleum naphtha can cause nervous system damage.
Petroleum naphtha	Repeated overexposure to petroleum naphtha can cause nervous system damage.
++ Ethyl benzene	Target Organ(s): hearing, Kidney, Liver
++ Naphthalene	Repeated overexposure to naphthalene may cause cataracts. Repeated overexposure to naphthalene may cause destruction of red blood cells with anemia, fever, jaundice and kidney and liver damage.
Toluene	Inhalation: Target Organ(s): Central nervous system., Hearing Repeated overexposure to toluene may cause loss of appetite, liver enlargement, and kidney and lung damage. Repeated inhalation of hydrocarbon solvents such as toluene can cause chronic neurological disturbances. Chronic exposure to toluene has been shown to cause hearing loss in animal experiments. The effect may be potentiated by acetyl salicylic acid and n-hexane to produce irreversible auditory damage. Prolonged and repeated exposure to toluene may cause color vision loss in humans.

12. Ecological information

Ecotoxicity

Fish

Xylene	LC 50 (Rainbow Trout, 96 h): 2.6 mg/l NOEC (Rainbow Trout, 56 d): > 1.3 mg/l
Petroleum naphtha	LC 50 (Fathead Minnow, 4 d): 3 mg/l
Petroleum naphtha	LC 50 (Rainbow Trout, 4 Days): 2 mg/l
++ Ethyl benzene	LC 50 (Rainbow Trout, 96 h): 4.2 mg/l
Polyether amine	LC 50 (Not reported, 96 h): > 1 - 10 mg/l
Toluene	LC 50 (Coho salmon,silver salmon (Oncorhynchus kisutch), 4 d): 5.5 mg/l NOEC (Oncorhynchus kisutch; Oncorhynchus mykiss, 40 d): 1.39 mg/l

Aquatic Invertebrates

Xylene	EC 50 (Water flea (Daphnia magna), 48 h): 3.82 mg/l NOEC (Water flea (Daphnia magna), 21 d): 1.57 mg/l

	EC 50 (Water flea (Daphnia magna), 21 d): > 1.57 mg/l
Petroleum naphtha	EC 50 (Water flea (Daphnia magna), 2 d): 1.1 mg/l
Petroleum naphtha	EC 50 (Water flea (Daphnia magna), 2 d): 3 mg/l
++ Ethyl benzene	EC 50 (Water flea (Daphnia magna), 48 h): 1.8 mg/l NOEC (Ceriodaphnia dubia, 7 d): 0.96 mg/l
Toluene	EC 50 (Water Flea (Ceriodaphnia Dubia), 2 d): 3.78 mg/l NOEC (Ceriodaphnia dubia, 7 d): 0.74 mg/l

Toxicity to Aquatic Plants

Xylene	EC 50 (Algae (Pseudokirchneriella subcapitata), 73 h): 4.36 mg/l
Petroleum naphtha	EC 50 (Green algae (Selenastrum capricornutum), 4 d): 1.1 mg/l
Petroleum naphtha	EC 50 (Green algae (Selenastrum capricornutum), 4 d): 1.1 mg/l
++ Ethyl benzene	EC 50 (Green algae (Selenastrum capricornutum), 96 h): 3.6 mg/l NOEC (Green algae (Selenastrum capricornutum), 96 h): 3.4 mg/l
Toluene	EC 50 (Green algae (Chlorella vulgaris), 3 h): 134 mg/l

Toxicity to soil dwelling organisms

No data available

Sediment Toxicity

No data available

Toxicity to Terrestrial Plants

No data available

Toxicity to Above-Ground Organisms

No data available

Toxicity to microorganisms

Xylene	LD 50 (Bacteria, 0.1 Days): > 100 mg/l
++ Ethyl benzene	EC 50 (Bacteria, 24 h): 96 mg/l
Toluene	EC 50 (Bacteria, 1 d): 84 mg/l

Persistence and Degradability

Biodegradation

Xylene	OECD TG 301 F, 90 %, 28 d, Readily biodegradable
Petroleum naphtha	OECD TG 301 F, 58 %, 28 d
Petroleum naphtha	OECD TG 301 F, 58 %, 28 d, Not readily degradable.
++ Ethyl benzene	OECD TG 310, 79 %, 28 d, Readily biodegradable
Toluene	Miscellaneous, 80 %, 20 d, Readily biodegradable

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Xylene	Bioconcentration Factor (BCF): 25.9 (Measured)
++ Ethyl benzene	Coho salmon,silver salmon (Oncorhynchus kisutch), Bioconcentration Factor (BCF): 1 (Measured)
Toluene	Fish, Bioconcentration Factor (BCF): 90

Partition Coefficient n-octanol / water (log Kow)

Xylene	Log Kow: 3.16 (estimated)
Petroleum naphtha	Log Kow: 3.1 (calculated)
++ Ethyl benzene	Log Kow: 3.6 (Measured)
Toluene	Log Kow: 2.73 20 °C 68 °F

Mobility:

No data available

Other Adverse Effects: No data available.

13. Disposal considerations

Disposal instructions: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.
Dispose of packaging or containers in accordance with local, regional, national and international regulations. 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.

Contaminated Packaging: Container packaging may exhibit hazards.

14. Transport information

DOT

UN Number:	UN 1993
UN Proper Shipping Name:	Flammable liquids, n.o.s.(Xylene, Naphthalene)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
Packing Group:	III
Marine Pollutant:	Yes
Special precautions for user:	None established
Reportable quantity	Naphthalene 100 lbs Xylene 100 lbs

IMDG

UN Number:	UN 1993
UN Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S.(Xylene, Naphthalene)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
EmS No.:	F-E, S-E
Packing Group:	III
Marine Pollutant:	Yes
Limited quantity	5.00L
Excepted quantity	E1
Special precautions for user:	None established

IATA

UN Number:	UN 1993
Proper Shipping Name:	Flammable liquid, n.o.s.(Xylene, Naphthalene)
Transport Hazard Class(es):	
Class:	3
Label(s):	3
Marine Pollutant:	Yes
Packing Group:	III
Excepted quantity	E1
Environmental Hazards	P
Special precautions for user:	None established
Other information	
Passenger and cargo aircraft:	Allowed.
Cargo aircraft only:	Allowed.

Transport in bulk according to Annex II of MARPOL and the IBC Code

None known.

The DOT shipping information in this section is based on a bulk container. Please review the accompanying shipping papers for the correct shipping descriptions based the size of the package. Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. During transportation, steps must be taken to prevent load shifting or materials falling, and all relating legal statutes should be obeyed. Review classification requirements before shipping materials at elevated temperatures.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Chemical Identity	Reportable quantity
Aminoalkyl substituted alkylphenol	De minimis concentration: 1%

CERCLA Hazardous Substance List (40 CFR 302.4)

Chemical Identity	CAS number	Reportable quantity	Calculated[1]
Xylene	1330-20-7	100 lbs	400 lbs 182 kgs

Ethyl benzene	100-41-4	1000 lbs	20000 lbs 9072 kgs
Naphthalene	91-20-3	100 lbs	16901 lbs 7666 kgs
Toluene	108-88-3	1000 lbs	> 50000 lbs > 22680 kgs
Benzene	71-43-2	10 lbs	> 50000 lbs > 22680 kgs

[1]This is the amount product/material required to be released before CERCLA reporting is required.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 311 Classifications

Flammable (gases, aerosols, liquids, or solids)
Skin Corrosion or Irritation
Serious eye damage or eye irritation
Carcinogenicity
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Aspiration Hazard
Physical Hazards Not Otherwise Classified

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity	CAS number	Percent by Weight	Reportable quantity
Xylene	1330-20-7	25.0 %	100 lbs
Ethyl benzene	100-41-4	5.0 %	1000 lbs
Naphthalene	91-20-3	0.6 %	100 lbs
Toluene	108-88-3	0.1 %	1000 lbs
Benzene	71-43-2	237.0 PPM	10 lbs

SARA 313 (TRI Reporting)

Chemical Identity	CAS number	Percent by Weight	Reporting threshold for other uses	Reporting threshold for manufacturing and processing
Xylene	1330-20-7	25.0 %	10000 lbs	25000 lbs
Ethyl benzene	100-41-4	5.0 %	10000 lbs	25000 lbs
Naphthalene	91-20-3	0.6 %	10000 lbs	25000 lbs

US State Regulations

US. California Proposition 65

This product can expose you to chemicals including: ++ Benzene (237.00PPM) which is [are] known to the State of California to cause cancer and birth defects or other reproductive harm.

This product can expose you to chemicals including: ++ Ethyl benzene (5.00%) ++ Naphthalene (0.591%) which is [are] known to the State of California to cause cancer.

This product can expose you to chemicals including: Toluene (0.125%) which is [are] known to the State of California to cause birth defects or other reproductive harm.

Inventory Status

Australia (AICS)
All components are in compliance with chemical notification requirements in Australia.

Canada (DSL/NDSL)
All substances contained in this product are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List (DSL) or are exempt.

China (IECSC)
This product contains a substance or polymer that has been notified and is restricted to import by the notifier.

European Union (REACh)
To obtain information on the REACH compliance status of this product, please e-mail REACH@SDSInquiries.com.

Japan (ENCS)
This product contains a substance that is not listed on the Japanese Existing and New Chemical Substances (ENCS) list.

Korea (ECL)
All components are in compliance in Korea.

New Zealand (NZIoC)
All components are in compliance with chemical notification requirements in New Zealand.

Philippines (PICCS)
All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

Switzerland (SWISS)
All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

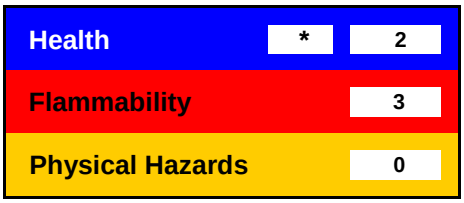
Taiwan (TCSCA)
All components of this product are listed on the Taiwan inventory.

United States (TSCA)
All substances contained in this product are listed on the TSCA inventory or are exempt.

The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.

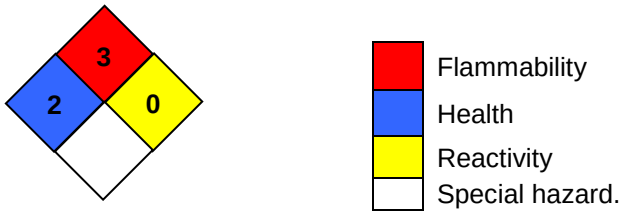
16.Other information, including date of preparation or last revision

HMIS Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date:	03/14/2019
Version #:	4.2
Source of information:	Internal company data and other publically available resources.
Further Information:	Contact supplier (see Section 1)
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