QMI Fuel Injector Cleaner

Revision date: 06/10/2009

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

QMI
3606 Craftsman Blvd.
Lakeland, FL 33803 USA

Emergency contact; CHEM-TEL 1-800-255-3924
Telephone 863-665-3338

Product name QMI Fuel Injector Cleaner
Product code GL1810

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, Water white to yellowish

WARNING! FLAMMABLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE DERMATITIS AND BURNS.

Potential Health Effects

Routes of exposure

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material:, Skin, lung (for example, asthma-like conditions), Kidney, Liver, Central nervous system, blood-forming system, male reproductive system, immune system, auditory system, eye, Individuals with preexisting heart disorders maybe more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:, redness of the skin, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), discomfort in the chest, central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, temporary changes in behavior, effects on memory, Weakness, mild, temporary changes in the liver, respiratory depression (slowing of the breathing rate), Shortness of breath, Lack of coordination, confusion, Difficulty in breathing, irregular heartbeat, Bloody urine, blood abnormalities (breakage of red blood cells), narcosis (dazed or sluggish feeling), kidney damage, liver damage, respiratory failure, coma

Target Organs

Acute lethal exposure to ethylene glycol monobutyl ether in animal studies has resulted in congestion of organs including kidney, spleen, and lung., This material (or a component) has been shown to lower activity of certain immune system cells in experimental animals. The significance of this effect with respect to human health is uncertain., Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans., Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals:, mild, reversible spleen effects, blood abnormalities, cardiac sensitization, cataracts, testis damage, kidney damage, liver damage, effects on hearing, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans:, central nervous system effects, liver abnormalities

Carcinogenicity

Ethylbenzene has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain. The International Agency for Research on Cancer (IARC) has classified ethylbenzene as a possible human carcinogen. Ethylene glycol monobutyl ether has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain.

Reproductive hazard

This material (or a component) may be harmful to the human fetus based on positive test results with laboratory animals., Cumene (isopropylbenzene) did not cause harm to the unborn pup in laboratory animal studies, even at levels which were harmful to the pregnant animal.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	>=50-<60%
XYLENE	1330-20-7	>=30-<40%
ETHYL BENZENE	100-41-4	>=5-<10%
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	>=5-<10%
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC	64742-95-6	>=1.5-<5%
POLYOLEFIN ALKYLPHENOL ALKYL AMINE		>=1-<1.5%

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray, Dry chemical, Carbon dioxide (CO2)

Hazardous combustion products

Aldehydes, carbon dioxide and carbon monoxide, Hydrocarbons, Ketones, nitrogen oxides (NOx), Organic acids, organic compounds, Sulphur oxides

Precautions for fire-fighting

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Water may be ineffective for extinguishment unless used under favorable conditions by experienced fire fighters. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Ensure adequate ventilation. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Pay attention to the spreading of gases especially at ground level (heavier than air) and to the direction of the wind.

Environmental precautions

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

Methods for cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Other information

Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapours/mists with a water spray jet.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

Storage

Store in a cool, dry, ventilated area, away from incompatible substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC		64742-89-8
OSHA Z1	time weighted average	500 ppm
ACGIH	time weighted average	300 ppm
ACGIH	time weighted average	1,370 mg/m3

XYLENE		1330-20-7
ACGIH	time weighted average	100 ppm
ACGIH	Short term exposure limit	150 ppm
OSHA Z1	Permissible exposure limit	100 ppm
OSHA Z1	Permissible exposure limit	435 mg/m3
NIOSH	Recommended exposure limit (REL):	100 ppm
NIOSH	Recommended exposure limit (REL):	435 mg/m3
NIOSH	Short term exposure limit	150 ppm
NIOSH	Short term exposure limit	655 mg/m3

ETHYL BENZENE		100-41-4
ACGIH	time weighted average	100 ppm
ACGIH	Short term exposure limit	125 ppm
NIOSH	Recommended exposure limit (REL):	100 ppm
NIOSH	Recommended exposure limit (REL):	435 mg/m3
NIOSH	Short term exposure limit	125 ppm
NIOSH	Short term exposure limit	545 mg/m3
OSHA Z1	Permissible exposure limit	100 ppm
OSHA Z1	Permissible exposure limit	435 mg/m3

ETHYLENE GLYCOL MONOBUTYL ETHER		111-76-2
ACGIH	time weighted average	20 ppm
NIOSH	Recommended exposure limit (REL):	5 ppm
NIOSH	Recommended exposure limit (REL):	24 mg/m3
OSHA Z1	Permissible exposure limit	50 ppm
OSHA Z1	Permissible exposure limit	240 mg/m3

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.
Wear resistant gloves (consult your safety equipment supplier).
Discard gloves that show tears, pinholes, or signs of wear.

Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be persmissible under certain circumstancs where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	No data
Colour	Water white to yellowish
Odour	No data
Boiling point/boiling range	No data
pH	No data
Flash point	70 °F / 21 °C (PMCC)
Evaporation rate	No data
Explosion limits	No data
Vapour pressure	No data
Vapour density	No data
Density	0.800 g/cm3 @ 68 °F / 20 °C 6.660 lb/gal @ 68 °F / 20 °C
Solubility	No data
Partition coefficient: n-octanol/water	No data
log Pow	no data available
Autoignition temperature	No data

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

excessive heat, Do not allow evaporation to dryness. Heat, flames and sparks.

Incompatible products

Acids, alkalis, aluminum, Amines, Ammonia, Bases, chlorates, Chlorine, Nitric acid, salts of strong bases, Strong oxidizers, sulphuric acid

Hazardous decomposition products

Aldehydes, carbon dioxide and carbon monoxide, Hydrocarbons, ketones, nitrogen oxides (NOx), Organic acids, organic compounds, Sulphur oxides

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	LD 50 Rat: > 8,000 mg/kg
XYLENE	LD 50 Rat: 4,300 mg/kg
ETHYL BENZENE	LD 50 Rat: 3,500 mg/kg
ETHYLENE GLYCOL MONOBUTYL ETHER	LD 50 Guinea pig: 1,200 mg/kg
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC	LD 50 Rat: > 5,600 mg/kg
POLYOLEFIN ALKYLPHENOL ALKYL AMINE	no data available

Acute inhalation toxicity

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	LC 50 Rat: 3400 ppm, 4 h
XYLENE	no data available
ETHYL BENZENE	LC Lo Rat: 4000 ppm, 4 h
ETHYLENE GLYCOL MONOBUTYL ETHER	LC 50 Guinea pig: > 633 ppm, 1 h
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC	LC 50 Rat: > 10,200 mg/m3 , 4 h
POLYOLEFIN ALKYLPHENOL ALKYL AMINE	no data available

Acute dermal toxicity

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	LD 50 Rat: > 4,000 mg/kg
XYLENE	LD 50 Rabbit: > 2,000 mg/kg
ETHYL BENZENE	LD 50 Rabbit: 17,800 mg/kg
ETHYLENE GLYCOL MONOBUTYL ETHER	LD 50 Guinea pig: > 2,000 mg/kg
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC	LD 50 Rabbit: > 4,000 mg/kg
POLYOLEFIN ALKYLPHENOL ALKYL AMINE	no data available

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish
No data
Acute Toxicity to Aquatic Invertebrates
No data

Environmental fate and pathways
No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods
Dispose of in accordance with all applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

IMDG:
UN1993, FLAMMABLE LIQUID, N.O.S. (SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC,) 3, II
IATA_P:
UN1993, Flammable liquid, n.o.s. (SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC,) 3, II
IATA_C:
UN1993, Flammable liquid, n.o.s. (SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC,) 3, II
CFR_ROAD:
UN1993, Flammable liquids, n.o.s. (SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC,) 3, II
CFR_RAIL:
UN1993, Flammable liquids, n.o.s. (SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC,) 3, II
CFR_INWTR:
UN1993, Flammable liquids, n.o.s. (SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC,) 3, II
IMDG_ROAD:
UN1993, FLAMMABLE LIQUID, N.O.S. (SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC,) 3, II
IMDG_RAIL:
UN1993, FLAMMABLE LIQUID, N.O.S. (SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC,) 3, II

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65
WARNING! This product contains a chemical known in the State of California to cause cancer.
ETHYL BENZENE
BENZENE
NAPHTHALENE
FURAN
ACETALDEHYDE
PROPYLENE OXIDE

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.
TOLUENE
BENZENE

SARA Hazard Classification Fire Hazard
Acute Health Hazard
Chronic Health Hazard

SARA 313 Component(s)

XYLENE	1330-20-7	30.08%
ETHYL BENZENE	100-41-4	8.59%
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	6.70%

Reportable quantity - Product
US. EPA CERCLA Hazardous Substances (40 CFR 302) 332 lbs

Reportable quantity - Components

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	none
XYLENE	1330-20-7	100 lbs
ETHYL BENZENE	100-41-4	1000 lbs
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	none
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC	64742-95-6	none
POLYOLEFIN ALKYLPHENOL ALKYL AMINE		none

	Health	Flammability	Reactivity	Other
HMIS	1*	3	0	
NFPA	1	3	0	

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.