

**QMI****MATERIAL SAFETY DATA SHEET****QMI Air Intake Cleaner -- # GL1806**

Revision Date: 08/29/2011

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

QMI  
3606 Craftsman Blvd  
Lakeland, FL 33083  
USA

Telephone: 863-665-3338  
Emergency telephone: 800-255-3924

Product name: QMI Air Intake Cleaner (12 ounce)  
Product code: GL1806

**2. HAZARDS IDENTIFICATION****Emergency Overview**

Appearance: liquid

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

**Potential Health Effects****Exposure routes**

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

**Eye contact**

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

**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**

This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

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**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), Upper respiratory tract, Kidney, Central nervous system, blood-forming system, auditory system, 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: metallic taste, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), runny nose, 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 mood and behavior, lack of coordination, confusion, irregular heartbeat, high blood sugar.

**Target Organs**

This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals., Prolonged intentional toluene abuse may lead to damage to many organ systems having effects on: central and peripheral nervous systems, vision, hearing, liver, kidneys, heart and blood. Such abuse has been associated with brain damage characterized by disturbances in gait, personality changes and loss of memory. Comparable central nervous system effects have not been shown to result from occupational exposure to toluene., Prolonged intentional toluene abuse may lead to hearing loss progressing to deafness. In addition, while noise is known to cause hearing loss in humans, it has been suggested that workers exposed to organic solvents, including toluene, along with noise may suffer greater hearing loss than would be expected from exposure to noise alone., Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, blood abnormalities, respiratory tract damage (nose, throat, and airways), damage to the blood-forming system, male and female reproductive fertility effects, effects on hearing, central nervous system damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans, kidney damage.

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**Carcinogenicity**

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA). Methylpyrrolidone (NMP) caused an increased number of liver tumors in mice, but not rats, that had ingested high doses over a lifetime. The relevance of this finding to humans is uncertain. NMP is not listed as carcinogenic by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

**Reproductive hazard**

This material (or a component) has been shown to cause birth defects in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain., Toluene may be harmful to the human fetus based on positive test results with laboratory animals. Case studies show that prolonged intentional abuse of toluene during pregnancy can cause birth defects in humans.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Components</u>	<u>CAS-No.</u>	<u>Concentration</u>
METHYL-N 2-PYRROLIDONE	872-50-4	>=40-<50%
ACETONE	67-64-1	>=40-<50%
TOLUENE	108-88-3	>=5-<10%

**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.

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**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:** This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion. 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.

**Treatment:** No information available.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Water spray, Dry chemical, Carbon dioxide (CO<sub>2</sub>)

**Hazardous combustion products**

Carbon dioxide and carbon monoxide, Hydrocarbons, nitrogen compounds

**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.

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**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/vapors/mists with a water spray jet.

<b>7. HANDLING AND STORAGE</b>
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**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.

<b>8. EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
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**Exposure Guidelines**

<b>ACETONE</b>		<b>67-64-1</b>
ACGIH	time weighted average	500 ppm
ACGIH	Short term exposure limit	750 ppm
NIOSH	Recommended exposure limit (REL):	250 ppm
NIOSH	Recommended exposure limit (REL):	590 mg/m <sup>3</sup>
OSHA Z1	Permissible exposure limit	1,000 ppm
OSHA Z1	Permissible exposure limit	2,400 mg/m <sup>3</sup>

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<b>TOLUENE</b>		<b>108-88-3</b>
ACGIH	time weighted average	20 ppm
NIOSH	Recommended exposure limit (REL):	100 ppm
NIOSH	Recommended exposure limit (REL):	375 mg/m3
NIOSH	Short term exposure limit	150 ppm
NIOSH	Short term exposure limit	560 mg/m3
OSHA Z2	time weighted average	200 ppm
OSHA Z2	Ceiling Limit Value:	300 ppm
OSHA Z2	Maximum concentration:	500 ppm

**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. Maintain eye wash station near work area.

**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 permissible under certain circumstances 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.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state</b>	liquid
<b>Form</b>	No data
<b>Colour</b>	No data
<b>Odour</b>	No data
<b>Boiling point/boiling range</b>	No data
<b>pH</b>	No data
<b>Flash point</b>	-4.00 °F / -20.00 °C, Tag closed cup
<b>Evaporation rate</b>	No data
<b>Explosion limits</b>	No data
<b>Vapour pressure</b>	No data
<b>Vapour density</b>	No data
<b>Density</b>	0.894 g/cm <sup>3</sup> @ 68 °F / 20 °C 7.450 lb/gal @ 68 °F / 20 °C
<b>Solubility</b>	No data
<b>Partition coefficient: n octanol/water</b>	No data
<b>log Pow</b>	no data available
<b>Autoignition temperature</b>	No data

**10. STABILITY AND REACTIVITY****Stability**

Stable.

**Conditions to avoid**

Exposure to moisture., Exposure to light. Heat, flames and sparks.

**Incompatible products**

Acids, alkalis, Amines, Ammonia, halogens, peroxides, Reducing agents, Strong oxidizing agents

**Hazardous decomposition products**

Carbon dioxide and carbon monoxide, Hydrocarbons, nitrogen compounds

**Hazardous reactions**

Product will not undergo hazardous polymerization.

**Thermal decomposition**

No data

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**11. TOXICOLOGICAL INFORMATION****Acute oral toxicity**

METHYL-N 2-PYRROLIDONE	LD 50 Rat: 3,914 mg/kg
ACETONE	LD 50 Rat: 5,800 mg/kg
TOLUENE	LD 50 Rat: 2,600 - 7,500 mg/kg

**Acute inhalation toxicity**

METHYL-N 2-PYRROLIDONE	LC 50 Rat: > 5.1 mg/l ,
ACETONE	LC 50 Rat: > 16000 ppm, 4 h
TOLUENE	LC 50 Rat: 8000 ppm, 4 h

**Acute dermal toxic**

METHYL-N 2-PYRROLIDONE	LD 50 Rabbit: 8,000 mg/kg
ACETONE	LD 50 Rabbit: > 20,000 mg/kg
TOLUENE	LD 50 Rabbit: 12,124 mg/kg

**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. For assistance with your waste management needs - including disposal, recycling and waste stream reduction.

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**14. TRANSPORT INFORMATION****IMDG:**

UN1993, FLAMMABLE LIQUID, N.O.S. (ACETONE, TOLUENE) 3, II

**IATA\_P:**

UN1993, Flammable liquid, n.o.s. (ACETONE, TOLUENE) 3, II

**IATA\_C:**

UN1993, Flammable liquid, n.o.s. (ACETONE, TOLUENE) 3, II

**CFR\_ROAD:**

UN1993, Flammable liquids, n.o.s. (ACETONE, TOLUENE) 3, II

**CFR\_RAIL:**

UN1993, Flammable liquids, n.o.s. (ACETONE, TOLUENE) 3, II

**CFR\_INWTR:**

UN1993, Flammable liquids, n.o.s. (ACETONE, TOLUENE) 3, II

**IMDG\_ROAD:**

UN1993, FLAMMABLE LIQUID, N.O.S. (ACETONE, TOLUENE) 3, II

**IMDG\_RAIL:**

UN1993, FLAMMABLE LIQUID, N.O.S. (ACETONE, TOLUENE) 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.

BENZENE

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

METHYL-N 2-PYRROLIDONE

TOLUENE

BENZENE

**SARA Hazard Classification** Fire Hazard

Acute Health Hazard

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**SARA 313 Component(s)**

METHYL-N 2-PYRROLIDONE	872-50-4	46.05%
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TOLUENE	108-88-3	9.72%
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**New Jersey RTK Label Information**

METHYL-N 2-PYRROLIDONE	872-50-4
ACETONE	67-64-1
TOLUENE	108-88-3

**Pennsylvania RTK Label Information**

METHYL-N 2-PYRROLIDONE	872-50-4
ACETONE	67-64-1
TOLUENE	108-88-3

**Reportable quantity - Product**

US. EPA CERCLA Hazardous Substances (40 CFR 302)	10280 lbs
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**Reportable quantity - Components**

METHYL-N 2-PYRROLIDONE	872-50-4	none
ACETONE	67-64-1	5000 lbs
TOLUENE	108-88-3	1000 lbs

	<b>Health</b>	<b>Flammability</b>	<b>Reactivity</b>	<b>Other</b>
<b>HMIS</b>	2	3	0	
<b>NFPA</b>	2	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.