



T150AIC
Titan Air Intake Cleaner



Section 1: Chemical Product and Company Identification

Manufacturer or Supplier Name: Shrader Canada Limited
Address: 830 Progress Court, Oakville, Ontario L6L 6K1

Date of MSDS Preparation: 09/29/2005 **Revision:** 1
Product Use: Air intake cleaner.
Chemical Family: Aromatic solvent blend.

Section 2: Composition/Information on Ingredients

Hazardous Ingredients	%	LD50 and LC50	ACGIH TWA	Ecotoxicity - Aquatic Toxicity
TOLUENE 108-88-3	15-40	Inhalation LC50 Rat:12.5 mg/L 4h Oral LD50 Rat:636 mg/kg Dermal LD50 Rabbit:8390 mg/kg Inhalation LC50 Rat:26700 ppm 1h	= 50 ppm TWA Skin - potential significant contribution to overall exposure by the cutaneous route	LC50 (96 h) rainbow trout: 24.0 mg/L. Cond: static LC50 (96 h) fathead minnow: 31.7 mg/L. Cond: flow-through LC50 (96 h) fathead minnow (1 day old): 25 mg/L. Cond: flow-through LC50 (96 h) bluegill: 24.0 mg/L. Cond: static EC50 (48 h) water flea: 310 mg/L EC50 (48 h) water flea: 11.3 mg/L EC50 (30 min) Photobacterium phosphoreum : 19.7 mg/L

XYLENE, MIXTURE OF ISOMERS 1330-20-7	15-40	Oral LD50 Rat:4300 mg/kg Inhalation LC50 Rat:5000 ppm 4h Dermal LD50 Rabbit:1700 mg/kg	= 100 ppm TWA =150 ppm STEL	LC50 (96 h) fathead minnow: 13.4 mg/L. Cond: flow-through LC50 (96 h) rainbow trout: 8.05 mg/L. Cond: flow-through LC50 (96 h) bluegill: 16.1 mg/L. Cond: flow-through EC50 (48 h) water flea: 3.82 mg/L EC50 (24 h) Photobacterium phosphoreum : 0.0084 mg/L
ACETONE 67-64-1	10-30	Oral LD50 Rat:1800 mg/kg Dermal LD50 Rabbit:20000 mg/kg Inhalation LC50 Rat:76 mg/L 4h	= 500 ppm TWA =750 ppm STEL	LC50 (96 h) bluegill: 8300 mg/L. Cond: static LC50 (96 h) rainbow trout: 5540 mg/L. Cond: static LC50 (96 h) fathead minnow: 6210 mg/L. Cond: flow-through LC50 (48 h) water flea: 0.0039 mg/L EC50 (48 h) water flea: 12700 mg/L
Carbon Dioxide 124-38-9	1-5	Inhalation LC50 Mouse:836 ppm 4h	= 5000 ppm TWA =30000 ppm STEL	Not Available
METHANOL 67-56-1	0.1-1.0	Dermal LD50 Rabbit:15800 mg/kg Oral LD50 Rat:5628 mg/kg Inhalation LC50 Rat:64000 ppm 4h Inhalation LC50 Rat:83.2 mg/L 4h	= 200 ppm TWA =250 ppm STEL Skin - potential significant contribution to overall exposure by the cutaneous route	LC50 (48 h) trout: 8000 mg/L. Cond: LC50 (96 h) rainbow trout (fingerling): 13 mg/L. Cond: LC50 (96 h) fathead minnow (28 days old): 29400 mg/L. Cond: flow-through EC50 (5 min) Photobacterium phosphoreum : 43000 mg/L EC50 (15 min) Photobacterium phosphoreum : 40000 mg/L EC50 (25 min) Photobacterium phosphoreum : 39000 mg/L

Section 3: Hazards Identification

- Ingestion:** Ingestion of small amounts during normal handling are not likely to cause injury. Larger amounts may cause effects similar to those described under inhalation. Large amounts are similar to those described under inhalation. Swallowing Methanol may result in blindness or other eye damage and nervous system damage.
- Inhalation:** High concentrations may cause respiratory irritation and central nervous system depression with results ranging from dizziness and headache to unconsciousness.
- Eye Contact:** Direct contact causes eye irritation.
- Chronic Effects:** Chronic overexposure to Toluene is associated with brain (CNS) damage, liver, kidney and blood effects. Animals exposed to Acetone over long periods of time developed eye and kidney damage. Long term exposure to high levels of Methanol vapours may cause dizziness, disturbed sleep and severe recurrent headaches, impaired vision, and damage to kidneys, heart and

other internal organs. Xylene has caused cardiac, liver and kidney effects and anemia in laboratory animal tests. Chronic overexposure to solvents such as Xylene can cause nervous system damage.

Section 4: First Aid Measures

Ingestion: Do NOT induce vomiting. Give water if conscious. Do not induce vomiting. Get medical attention immediately.

Skin Contact: Remove contaminated clothing and launder before reuse. Seek medical attention if irritation persists.

Inhalation: Not necessary under normal conditions of use. If affected, remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention.

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes, lifting upper and lower lids. Remove contact lenses if any after the initial flushing and then continue flushing. Get medical attention if irritation persists.

Additional Information Exposure may increase myocardial irritability. Cardiac arrhythmia has been reported. Use sympathomimetic drugs with caution. The main hazard following ingestion is aspiration of the liquid into the lungs during subsequent vomiting. Only if more than 2.0 mL/kg body weight has been ingested, vomiting should be induced with supervision. If symptoms such as convulsions or unconsciousness occur before vomiting, gastric lavage should be considered.

Section 5: Fire Fighting Measures

Flash Point (°C): -8 (Liquid Component)

Flame Projection: > 45 cm. Aerosol will flashback.

NFPA Classification: Aerosol, Level 3

Lower Explosive Limit: Not Available

Upper Explosive Limit: Not Available

Autoignition Temperature (°C): Not Available

Sensitivity to Mechanical Impact: Contents under pressure. Protect against physical damage.

Conditions of Flammability: Flammable. Sprayed product will project a flame on contact with an ignition source. Contents under pressure. Containers may explode if heated. Do not use on vehicles unless cool. Vapours are heavier than air and may travel or be moved along the ground to an ignition source at locations distant from material handling.

Sensitivity to Static Discharge: Take precautionary measures against static discharges.

Hazardous Combustion: Carbon dioxide, carbon monoxide and other unidentified organic compounds.

Extinguishing Media: Use water spray to cool fire exposed containers and prevent bursting. Do not use a direct stream of water. Alcohol foam or water fog for large fires. Carbon dioxide or dry chemical for small fires.

Section 6: Accidental Release Measures

Leak or Spill Procedures:

Wear suitable protective clothing. Follow applicable explosion and fire precautions during the response. Stop the spill at the source when safe to do so. For large spills, dike the area to prevent spreading. Pump excess to a salvage container. Absorb residues and small spills with a non-flammable absorbent material and collect adsorbate for disposal. For large quantities refer to the environmental ministry.

Section 7: Handling and Storage

Handling Procedures:

Persons with cardiovascular or circulatory diseases, like angina, should not be exposed to this product. Wear all appropriate personal protective equipment during use. Use with adequate ventilation. Avoid breathing vapours. Use good personal hygiene. Avoid smoking, eating and drinking during use. Wash with soap and water after handling. Flammable. Keep away from heat, spark, flame and other sources of ignition. Do not use on hot vehicles. Contents under pressure. Containers of this material may contain hazardous residues when emptied. Do not cut, weld, drill or grind on or near this container.

Storage Requirements:

Flammable. Keep away from heat, sparks, ignition sources and oxidizing agents. Store in a cool, dry, well-ventilated area. Storage temperatures should not exceed 40°C. Keep from freezing. Keep containers tightly closed when not in use. Keep away from children.

Section 8: Exposure Controls/Personal Protection

Respiratory:	Not normally required. If the TLV is exceeded, a NIOSH-approved respirator is advised.
Gloves:	Avoid rubber, PVC and neoprene equipment. These are attacked by toluene.
Eyewear:	Safety glasses. Contact lenses should not be worn. They may contribute to the severity of the injury.
Clothing:	Sufficient clothing to prevent skin contact.
Ventilation:	Sufficient mechanical ventilation to maintain exposures below the TLV. General mechanical ventilation is not recommended as the sole means of controlling exposure. Make-up air should always be supplied to balance air exhausted.
Other protective equipment	Emergency showers and eyewash facilities should be nearby. The selection of personal protective equipment will vary depending on the conditions of use.

Section 9: Physical and Chemical Properties

Physical State:	Aerosol
Odour:	Aromatic odour.
Appearance:	Clear light yellow.
Evaporation Rate:	Not Available
Vapour Density (Air=1):	> 1
VOC %:	> 85 %

Boiling Point: Not Available
pH: Not available.
Solubility in Water: Negligible
Specific Gravity (H2O=1): 0.85 @ 20°C
Viscosity: Not available.

Section 10: Stability and Reactivity

Conditions of Instability:

Stable at ambient temperatures and pressures.

Hazardous Polymerization:

Hazardous polymerization will not occur.

Hazardous Decomposition:

See hazardous combustion products.

Incompatible Materials:

Avoid strong oxidizers such as HOOH, HNO₃, and oleum. Light.

Conditions of Reactivity:

Avoid contact with incompatible materials. Avoid excessive heat, sparks and open flame.

Section 11: Toxicological Information

Irritancy of Product:

May be mildly irritating to eyes and skin.

Sensitization to product:

In rare cases, may sensitize the heart muscles causing heart arrhythmia. Contains no known skin or respiratory sensitizers.

Carcinogenicity:

No components are listed as carcinogens by ACGIH, IARC, OSHA, or NTP.

Reproductive Effects:

Methanol has been reported to cause effects on animals' sperm production. Female workers exposed to Toluene at 60 to 100 ppm for about 3 years reported abnormal menstrual cycles. Xylene is reported to cause abnormally high miscarriage rates in pregnant animals.

Teratogenicity:

Acetone caused a high incidence of death when tested on chick embryos. Methanol has been reported to cause toxic effects and abnormal development in offspring of animals exposed during pregnancy. Toluene is an experimental teratogen. It has been shown to cross the placenta in animal tests. Xylene is reported to cross the placenta. Effects on the offspring or pregnant, exposed animals included reduced birth weight, delayed bone and kidney development and skeletal abnormalities.

Mutagenicity:

Not Available

Synergistic Products:

Exposure to alcohols may enhance potential for liver toxicity

Other Information:

No toxicological information is available for this product.

Section 12: Ecological Information

Environmental: Insoluble in water. Toxic to aquatic life. Aromatic hydrocarbons may be bioaccumulative but they have no food chain concentration potential.

Biodegradability: Not available.

Section 13: Disposal Considerations

Waste Disposal: Contents under pressure. Do not puncture, incinerate or expose to heat even when empty. Do not dump unused contents into sewers, on the ground or into any body of water. Reuse or recycling should be given priority over disposal under any circumstances. Destroy by incineration or biological treatment in accordance to applicable legislation.

Section 14: Transportation Information

Road shipment: AEROSOLS, Class 2.1, UN1950, ERG #126.

Marine shipment: AEROSOLS, Class 2, UN1950, EmS# F-E, S-U.
Flash Point (°C): -8 (Liquid Component)

Air Shipment: Aerosols, Flammable, N.O.S., Class 2.1, UN1950, PI 203.

Exemption: LTD QTY exemptions may be used if product is packaged in accordance with Schedule 1 of TDGR (Clear Language).

Product may be reclassified for air transportation if packaged in accordance to IATA regulations (i.e. Consumer Commodity, Class 9, ID 8000).

Section 15: Regulatory Information

WHMIS: A, B5, D2B

CEPA: All components are listed on the Domestic Substances List (DSL).

CPR Compliance: This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Section 16: Other Information

HMIS Rating: 241B

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