



T500VCC
Titan Valve & Combustion Chamber 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: 06/29/2005 **Revision:** 1
Product Use: Fuel injector cleaner.
Chemical Family: Aromatic solvent blend.

Section 2: Composition/Information on Ingredients

Hazardous Ingredients	%	LD50 and LC50	ACGIH TWA	Ecotoxicity - Aquatic Toxicity
XYLENE, MIXTURE OF ISOMERS 1330-20-7	30-60	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
ISOPROPANOL 67-63-0	10-30	Dermal LD50 Rabbit:12800 mg/kg Dermal LD50 Rat:12800 mg/kg Oral LD50 Rat:4396 mg/kg Inhalation LC50 Rat:72.6 mg/L 4h	= 200 ppm TWA =400 ppm STEL	LC50 (96 h) fathead minnow (31 days old): 61200 mg/L. Cond: flow-through LC50 (96 h) fathead minnow (29 days old): 94900 mg/L. Cond: flow-through EC50 (5 min) Photobacterium phosphoreum : 35390 mg/L

DIACETONE ALCOHOL 123-42-2	5-10	Dermal LD50 Rabbit:13500 mg/kg Oral LD50 Rat:4 g/kg	= 50 ppm TWA	LC50 (24 h) goldfish: 5000 mg/L. Cond: LC50 (96 h) bluegill: 420 mg/L. Cond: static EC50 (48 h) water flea: 8750 mg/L
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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. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.

Inhalation: High concentrations may cause respiratory irritation and central nervous system depression with results ranging from dizziness and headache to unconsciousness. Gross overexposure to Xylene by inhalation or ingestion may cause reversible damage to the central nervous system, liver and kidney.

Eye Contact: Direct contact causes eye irritation.

Chronic Effects: 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. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

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

Inhalation: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 25 minutes and get medical attention if irritation persists.

Additional Information 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): 13 to 15 °C

Flame Projection: Not Applicable.

NFPA Classification: Flammable Liquid, Class IB

Lower Explosive Limit: Not Available

Upper Explosive Limit: Not Available

Autoignition Temperature (°C): Not Available

Sensitivity to Mechanical Impact: Not Available

Conditions of Flammability:

Flammable. Do not use on vehicles unless cool. Sprayed product will project a flame on contact with an ignition source. Contents under pressure. Containers may explode if heated. 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. Aldehydes and reactive hydrocarbon.

Extinguishing Media:

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:

Contain spilled material. Avoid contamination of natural waterways. 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:

Flammable. Keep away from heat, spark, flame and other sources of ignition. Do not use on hot vehicles. Use with adequate ventilation. Avoid breathing vapours. Avoid skin and eye contact. Wear all appropriate personal protective equipment during use. Use good personal hygiene. Avoid smoking, eating and drinking during use. Wash with soap and water after handling. Containers of this material may contain hazardous residues when emptied.

Storage Requirements:

Store in a cool, dry, well-ventilated area. Storage temperatures should not exceed 40°C. Keep from freezing. 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:	Viton
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:	Liquid.
Odour:	Petroleum.
Appearance:	Clear light yellow.
Evaporation Rate:	Not Available
Vapour Density (Air=1):	Not Available
Boiling Point:	Not Available
pH:	Not available.
Specific Gravity (H₂O=1):	0.85
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. Avoid nitric acid and dichlorohydrate. Light.

Conditions of Reactivity:

Avoid excessive heat, sparks and open flame. May attack some plastics, rubber and coatings.

Section 11: Toxicological Information

Irritancy of Product:

Moderate to severely irritating to eyes. Moderate skin irritant. Respiratory irritant.

Sensitization to product:

Contains no known skin or respiratory sensitizers.

Carcinogenicity:

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

Reproductive Effects:

Xylene is reported to cause abnormally high miscarriage rates in pregnant animals.

Teratogenicity:

Xylene is reported to cross the placenta. Effects on the offspring of pregnant, exposed animals included reduced birth weight, delayed bone and kidney development, and skeletal abnormalities. Laboratory tests on rats showed mild developmental effects at Isopropanol

levels which produced maternal toxicity. No developmental effects were seen at levels which did not also produce maternal toxicity. In similar tests with rabbits, there were no indications of developmental toxicity at any exposure levels.

Mutagenicity:
Not Available

Synergistic Products:

Xylene's potential for liver toxicity is enhanced by the presence of other solvents including ethanol. Isopropanol increases the hepatotoxic effects of chlorinated aliphatic hydrocarbons.

Section 12: Ecological Information

Environmental: 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: Reuse or recycling should be given priority over disposal under any circumstances. Do not dump unused contents into sewers, on the ground or into any body of water. Dispose of in accordance with municipal, provincial and federal regulations.

Section 14: Transportation Information

Road shipment: FLAMMABLE LIQUID, N.O.S. (Xylene, Isopropyl Alcohol), Class 3, UN1993, PG II, ERG #128.

Marine shipment: FLAMMABLE LIQUID, N.O.S. (Xylene, Isopropyl Alcohol), Class 3, UN1993, PG II, EmS# F-E, S-E

Flash Point (°C): 13 to 15 °C

Air Shipment: Flammable Liquid, N.O.S. (Xylene, Isopropyl Alcohol), Class 3, UN1993, PG II, PI 305/307.

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: B2, D2A

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

Section 16: Other Information

HMIS Rating: 231B
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