

SHRADER CANADA

084NA26005 Hyundai Gas Treatment



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: 07/05/2002 **Revision:** 1
Product Use: Fuel system deposit remover.
Chemical Family: Petroleum distillates.

Section 2: Composition/Information on Ingredients

Hazardous Ingredients	%	LD50 and LC50	ACGIH TWA	Ecotoxicity - Aquatic Toxicity
ISOPROPANOL 67-63-0	30-60	Inhalation LC50 Rat : 16000 ppm/8H Oral LD50 Rat : 5045 mg/kg LD50 Mouse : 3600 mg/kg Dermal LD50 Rabbit : 12800 mg/kg	(400) ppm TWA	LC50 (96 hr) fathead minnow (29 days old): 94900-10400 mg/L. Cond: Flow-through, 24.4-24.6 degrees C, pH 7.09, 52.5 mg/L CaCO3.; LC50 (96 hr) fathead minnow (31 days old): 61200-65500 mg/L. Cond: Flow

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. Ingestion of large amounts may cause stomach irritation. Symptoms include nausea, vomiting and diarrhea. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.

Skin Contact: No hazard under normal conditions of use. Frequent or prolonged contact may dry and irritate the skin and cause a rash.

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. Vapours will irritate the eyes. Symptoms will include pain, redness and tearing.

Chronic Effects: Not Available.

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: Not a hazard under normal use conditions. If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

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 °C
Flame Projection:	Not Applicable.
NFPA Classification:	Flammable Liquid, Class IB
Autoignition Temperature (°C):	Not Available
Lower Explosive Limit:	Not Available
Upper Explosive Limit:	Not Available

Conditions of Flammability:

Flammable when heated to temperatures above the flash point and on contact with an ignition source. 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 Mechanical Impact:

Not Available

Sensitivity to Static Discharge:

Take precautionary measures against static discharges.

Extinguishing Media:

Alcohol foam or water fog for large fires. Use water spray to cool fire exposed containers and prevent bursting. Do not use a direct stream of water.

Hazardous Combustion:

Carbon dioxide, carbon monoxide and other unidentified organic compounds.

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:

Containers of this material may contain hazardous residues when emptied. Do not cut, weld, drill or grind on or near this container. Flammable. Keep away from heat, spark, flame and other sources of ignition. Use good personal hygiene. Avoid smoking, eating and drinking during use. Wash with soap and water after handling.

Storage Requirements:

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

Section 8: Exposure Controls/Personal Protection

Respiratory:	Not normally required. If the TLV is exceeded, a NIOSH-approved respirator is advised.
Gloves:	Natural Rubber, Nitrile, Viton, Neoprene.
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:	Alcohol odour.
Appearance:	Clear yellow.
Odour Threshold:	Not Available
Evaporation Rate:	Not Available
Vapour Density (Air=1):	> 1
VOC %:	48
Boiling Point:	Not Available
pH:	Not available.
Solubility in Water:	Negligible
Specific Gravity (H2O=1):	0.84
Viscosity:	3.1 @ 40°C

Section 10: Stability and Reactivity

Conditions of Instability:

Stable at ambient and moderately elevated 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 strong alkalis and strong mineral acids.

Conditions of Reactivity:

Avoid excessive heat, sparks and open flame.

Section 11: Toxicological Information

Irritancy of Product:

Not expected to be an eye irritant or a primary skin 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:

Not Available

Teratogenicity:

Not Available

Mutagenicity:

Not Available

Synergistic Products:

Not Available

Section 12: Ecological Information

Environmental: See composition/information on ingredients. Isopropanol may be harmful to aquatic life. No food chain concentration potential.

Biodegradability: Biodegradable. Volatizes rapidly.

Section 13: Disposal Considerations

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

Section 14: Transportation Information

Road shipment: ISOPROPANOL Solution, Class 3, UN1219, PG II, ERG #129.

Marine shipment: Not Available.
Flash Point (°C): 13 °C

Air Shipment: Not available.

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

Section 15: Regulatory Information

WHMIS: B2, 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: 230B
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