

SHRADER CANADA

084NA26027 Hyundai Engine Degreaser



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: 06/10/2001 **Revision:** 2
Product Use: Degreaser.
Chemical Family: Blend of petroleum-based solvents and detergents.

Section 2: Composition/Information on Ingredients

Hazardous Ingredients	%	LD50 and LC50	ACGIH TWA	Ecotoxicity - Aquatic Toxicity
Ethylene glycol 107-21-1	1-5	Inhalation LC50 Rat : 10876 mg/kg Oral LD50 Rat : 4700 mg/kg Oral LD50 Mouse : 5500 mg/kg Dermal LD50 Rabbit : 9530 uL/kg	A4 - Not Classifiable as a Human Carcinogen (aerosol)	LC50 (96 hr) rainbow trout: 41000 mg/L. Cond: 20 degrees C.; LC50 (96 hr) bluegill: 27500-41000 mg/L.; LC50 (96 hr) goldfish: 27500-41000 mg/L.; LC50 (48 hr) water flea: 46300 mg/L.; EC50 (30 min) Pho

Section 3: Hazards Identification

Ingestion: 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. Swallowing large volumes of Ethylene Glycol may cause severe kidney damage. Diminished hearing, difficulty swallowing, and weakness of the facial muscles have been reported in the late stages of severe poisoning.

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

Inhalation: No hazard under normal conditions of use. 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: Reports have associated repeated and prolonged occupational overexposure to various organic solvents with internal organ, brain and nervous system damage. Chronic prolonged exposures to Ethylene Glycol may cause central nervous system effects, liver and kidney 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:	Not a hazard under normal use conditions. If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.
Eye Contact:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
Additional Information	Ethanol is antidotal for ethylene glycol. 4-Methylpyrazole has also been used therapeutically for ethylene glycol poisoning before renal failure.

Section 5: Fire Fighting Measures

Flash Point (°C):	44 CCC
Flame Projection:	Not Applicable.
NFPA Classification:	Combustible Liquid, Class II
Autoignition Temperature (°C):	Not Available
Lower Explosive Limit:	1.1 %
Upper Explosive Limit:	6.0 %

Conditions of Flammability:

Flammable at all temperatures above the flash point 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. Vapours will form a flammable/explosive mixture with air between the upper and lower limits.

Sensitivity to Mechanical Impact:

Not Available

Sensitivity to Static Discharge:

Take precautionary measures against static discharges. All 20L pails and larger metal containers including tank cars and tank trucks should be grounded and/or bonded when material is transferred.

Extinguishing Media:

Alcohol foam or water fog for large fires. Carbon dioxide or dry chemical for small fires.

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:

When applying to an engine with an air spray, do not use too much air pressure. Too much air pressure can generate a fine mist which is hazardous when breathed. Use with adequate ventilation. Avoid breathing vapours. Containers of this material may contain hazardous residues when emptied. Do not cut, weld, drill or grind on or near this container. Use good personal hygiene. Avoid smoking, eating and drinking during use. Wash with soap and water after handling.

Storage Requirements:

Combustible liquid. Keep away from heat, flame and oxidizers. Store in a cool area, away from all sources of heat, ignition and incompatibles. 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:	Impervious.
Eyewear:	Chemical splash goggles. 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:	Aromatic odour.
Appearance:	Clear yellow.
Evaporation Rate:	Not Available
Vapour Density (Air=1):	Not Available
Boiling Point:	100
pH:	8.4 to 9.0
Solubility in Water:	Emulsifies.
Specific Gravity (H2O=1):	0.87 to 0.90
Viscosity:	Not available.

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.

Conditions of Reactivity:

Avoid excessive heat, sparks and open flame.

Section 11: Toxicological Information

Irritancy of Product:

Eye irritant.

Sensitization to product:

The incident of allergic contact dermatitis on repeated skin contact with undiluted ethylene glycol is <1%.

Carcinogenicity:

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

Reproductive Effects:

Negative.

Teratogenicity:

Ethylene glycol produced no results when tested on chick embryos but harmful effects when tested on rodent fetuses.

Mutagenicity:

Ethylene glycol is an experimental mutagen.

Synergistic Products:

Not Available

Section 12: Ecological Information

Environmental: May be harmful to aquatic life. See composition/information on ingredients.

Biodegradability: Not available.

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.

Section 14: Transportation Information

Road shipment: PETROLEUM PRODUCTS, N.O.S., Class 3, UN1268, PG III, ERG #128.

Marine shipment: PETROLEUM PRODUCTS, N.O.S., Class 3, UN1268, PG III, EmS 3-07.
Flash Point (°C): 44 CCC

Air Shipment: Petroleum distillates, N.O.S. (Aromatic Naphtha), Class 3, UN1268, PG III, PI 309.

Exemption: Not regulated for rail or road shipment if packaged in containers of less than bulk size. LTD QTY exemptions may be used if product is packaged in accordance with Schedule 1 of TDGR (Clear Language)

Section 15: Regulatory Information

WHMIS: B3, 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 CPR.

Section 16: Other Information

HMIS Rating: 220B

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