

## 095NM10000 Hyundai Brake Cleaner (20L)



### 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:** 04/10/2003      **Revision:** 1  
**Product Use:** Brake parts cleaner.  
**Chemical Family:** Solvent blend. Non-chlorinated.

### Section 2: Composition/Information on Ingredients

Hazardous Ingredients	%	LD50 and LC50	ACGIH TWA	Ecotoxicity - Aquatic Toxicity
N-HEXANE 110-54-3	60-100	Inhalation LC50 Rat : 48000 ppm/4H Oral LD50 Rat : 28710 mg/kg	= 50 ppm TWA = 500 ppm TWA = 1000 ppm STEL skin - potential for cutaneous absorption	LC50 (96 hr) rainbow trout: 4.14 mg/L.; LC50 (96 hr) fathead minnow: 5.10 mg/L.; LC50 (96 hr) bluegill: 4.12 mg/L.; LC50 (48 hr) water flea: 3.87 mg/L.
ISOPROPANOL 67-63-0	1-5	Inhalation LC50 Rat : 16000 ppm/8H Oral LD50 Rat : 5045 mg/kg Oral LD50 Mouse : 3600 mg/kg Dermal LD50 Rabbit : 12800 mg/kg	= 200 ppm TWA = 400 ppm STEL	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 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:** 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:** Chronic overexposure to Hexane is reported to cause peripheral neuropathy and internal organ 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** 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):** <-18 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 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 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.

### Hazardous Combustion:

Carbon dioxide, carbon monoxide and other unidentified organic compounds.

### 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:

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

<b>Respiratory:</b>	Not normally required. If the TLV is exceeded, a NIOSH-approved respirator is advised.
<b>Gloves:</b>	Neoprene. Nitrile gloves.
<b>Eyewear:</b>	Safety glasses. Contact lenses should not be worn. They may contribute to the severity of the injury.
<b>Clothing:</b>	Sufficient clothing to prevent skin contact.
<b>Ventilation:</b>	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.
<b>Other protective equipment</b>	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

<b>Physical State:</b>	Liquid.
<b>Odour:</b>	Characteristic odour.
<b>Appearance:</b>	Colourless.
<b>Evaporation Rate:</b>	Not Available
<b>Vapour Density (Air=1):</b>	> 1
<b>VOC %:</b>	100
<b>Boiling Point:</b>	Not Available
<b>pH:</b>	Not available.
<b>Specific Gravity (H2O=1):</b>	0.682 at 15°C
<b>Viscosity:</b>	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, HNO<sub>3</sub>, and oleum. Light.

**Conditions of Reactivity:**

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:**

Contains no known skin or respiratory sensitizers.

**Carcinogenicity:**

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

**Reproductive Effects:**

Hexane is an experimental reproductive toxin.

**Teratogenicity:**

Hexane is an experimental teratogen.

**Mutagenicity:**

Not Available

**Synergistic Products:**

The toxic effects of hexane may be enhanced by alcohol, acetone and/or methyl ethyl ketone.

**Other Information:**

No toxicological information is available for this product.

## 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:** FLAMMABLE LIQUID, N.O.S. (Hexane, Isopropanol), Class 3, UN1993, PG II, ERG #128.

**Marine shipment:** FLAMMABLE LIQUID, N.O.S., (Hexane, Isopropanol), Class 3, UN1993, PG II, EmS# F-E, S-E

**Flash Point (°C):** <-18 C

**Air Shipment:** Flammable liquid, N.O.S. (Hexane, Isopropanol), 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)

## Section 15: Regulatory Information

**WHMIS:** B3, 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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