

**MATERIAL SAFETY DATA SHEET**  
**Cortec, Spray Technologies Division**  
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EMERGENCY PHONE NO.: (FOR SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT): 1-800-535-5053

**HI-PRO**

\* \* \* \* BRAKE PARTS CLEANER, NON-CHLORINATED\* \* \*

21003

**SECTION I - PRODUCT IDENTIFICATION**

PRODUCT NAME: **HI-PRO** Brake Parts Cleaner, Non-chlorinated (aerosol)

PRODUCT DESCRIPTION: Fast acting, contains no chlorinated solvents. Safely removes all contaminants from brake linings, drums, rotors and other brake parts. **Extremely flammable – not for use on or near energized equipment!**

RESTRICTIONS: Non-restricted

**SECTION II - HAZARDOUS INGREDIENTS**

INGREDIENT NAME(S)	CAS#	OCCUPATIONAL EXPOSURE LIMITS	
		TLV OR PEL	ORAL LD-50
Acetone	67-64-1	1000 ppm	N.E.
n-Heptane	142-82-5	500 ppm	N.E.
2-Butanone	78-93-3	200 ppm	N.E.
Toluene	108-88-3	200 ppm	N.E.
Ethanol	64-17-5	1000 ppm	7060 mg/kg (Rat)
Methanol	67-56-1	200 ppm	5.6 g/kg (Rat)
Isopropanol	67-63-1	400 ppm	N.E.
n-Propanol	71-23-8	200 ppm	N.E.
Xylene	1330-20-7	100 ppm	N.E.
Hexone	108-10-1	100 ppm	5.7 mg/kg (Rat)
Petroleum Hydrocarbon	64742-89-8	5 mg/mg3	N.E.
Carbon Dioxide	124-38-9	5000 ppm	N.E.

Carcinogenic: **OSHA** = no    **NTP** = no    **IARC** = no

**SECTION III - PHYSICAL DATA**

APPEARANCE: Transparent, colorless liquid  
 ODOR: Mild, sweet odor  
 BOILING POINT: 133 degrees F. (56.11 degrees C.) to 290 degrees F. (143 degrees C.)  
 VAPOR DENSITY (Air = 1): >1  
 VAPOR PRESSURE: 4896 mmHg  
 SOLUBILITY IN WATER: N.E.  
 SPECIFIC GRAVITY: 0.804  
 EVAPORATION RATE (Ether = 1): <1

**SECTION IV - FIRE AND EXPLOSION DATA**

HMIS RATING: Health – 2, Fire – 3, Reactivity - 1  
 FLASH POINT: <20 degree F  
 FLAMMABLE LIMITS: LEL:1.0% UEL: 19.0%  
 EXTINGUISHING MEDIA: Foam, dry chemical carbon dioxide.  
 UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapor concentrations when present within the flammable range (LEL, UEL) can be ignited with high-intensity heat sources or open flames, especially in poorly ventilated spaces. Heated containers may become over-pressurized and fail explosively.  
 SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should wear self-contained breathing apparatus and protective clothing.

**SECTION V - HEALTH HAZARD DATA**

EMERGENCY AND FIRST AID PROCEDURES:  
Eye Contact: Flush eyes with water for at least 15 minutes. Consult a physician. Skin Contact: Wash affected area with soap and water. If irritation develops or persists, consult a physician. Inhalation: Remove victim to fresh air, administer oxygen if necessary. If victim has stopped breathing begin CPR. Get medical attention. Ingestion: If liquid is swallowed, consult a physician immediately. DO NOT induce vomiting unless physician directed. If spontaneous vomiting occurs, keep victim's head below hips to prevent aspiration of vomitus into lungs.  
 MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: Pre-existing skin, heart or lung conditions.  
 PRIMARY ROUTES OF ENTRY: Inhalation, skin and eye contact.  
 HEALTH HAZARDS (acute and chronic) / EFFECTS OF OVEREXPOSURE: Excessive inhalation of high vapor concentrations may cause dizziness, weakness, fatigue, nausea, headache, unconsciousness, or, in extreme overexposures, asphyxiation. Aspiration of this material into lungs can cause chemical pneumonitis which may be fatal.

**SECTION VI - REACTIVITY DATA**

STABILITY: Stable under normal use and storage conditions.  
 HAZARDOUS POLYMERIZATION: Will not occur.  
 HAZARDOUS DECOMPOSITION PRODUCTS (under fire conditions): Oxides of carbon and unidentifiable hydrocarbons  
 INCOMPATIBILITY: Avoid strong mineral acids, strong bases, strong oxidizing agents, aldehydes, and halogens.  
 CONDITIONS TO AVOID: Alkali can cause condensation reactions to occur; however, these reactions would not be violent by nature.

**SECTION VII - SPILL OR LEAK PROCEDURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Immediately extinguish ignition sources, ventilate area. Use non-sparking utensils to take up gross quantities, inert, absorbant material to take up residues. Place into a DOT approved closed top container for disposal. Prevent spilled material from entering drains or sewers.  
 WASTE DISPOSAL: Dispose of waste or unwanted material in accordance with existing Federal, State and Local environmental regulations. Waste may be reclaimed or incinerated by permitted facilities.

**SECTION VIII - SAFE HANDLING AND USE INFORMATION**

RESPIRATORY PROTECTION: Not normally required; mechanical (general) ventilation is usually adequate. Wear a NIOSH approved organic respirator in nuisance-level vapor concentrations, a positive pressure, air-supplied respirator in high vapor concentrations or oxygen-deficient atmospheres. Local ventilation may also be utilized to control vapor emissions - use explosion proof equipment.

PROTECTIVE GLOVES: Chemical resistant rubber or plastic.

(Continued on page 2)

Page 2

**HI-PRO** Brake Parts Cleaner, Non-chlorinated 21003

EYE PROTECTION: Safety glasses, splash goggles, face shield

OTHER PROTECTIVE EQUIPMENT: Eye wash station.

**SECTION IX - SPECIAL PRECAUTIONS AND STORAGE DATA**

PRECAUTIONS TO BE TAKEN IN HANDLING: Avoid eye and skin contact with liquid. Avoid excessive inhalation of vapors. Use in a well-ventilated environment. Intentional inhalation of contents is harmful and may be fatal.

PRECAUTIONS TO BE TAKEN IN STORING: Store containers below 120°F (48°C), away from heat or ignition sources, open flame, out of direct sunlight.

**SECTION X – SHIPPING DATA**

U.N./N.A. NUMBER: UN1950

DOT/IATA SHIPPING NAME: Aerosols, flammable, (each not exceeding 1L capacity)

DOT/IATA HAZARD CLASS: 2.1

DOT/IATA REQUIRED LABELS: 2, Flammable gas (air shipment only)

DOT EXCEPTION: See code 49 section 172.101, column (8A). Section 173.306(h) permits "limited quantity" materials (inner packagings which do not exceed 1L capacity / 61 cubic inches and for which internal pressures do not exceed 180 psig at 130 degrees F.) meeting section 171.8 definition of "consumer commodity" to be renamed "Consumer commodity, reclassified as ORM-D when shipped via ground mode, domestically.

IMDG SHIPPING NAME: Aerosols, flammable, (each not exceeding 1L capacity)

FREIGHT CLASS: NMFC 48580, Sub 3

LTL: 55

TL:35

MW:36

T.S.C.A. STATUS: All components listed

PREPARED BY: Roger Hanson

DATE PREPARED: 05-22-00

SUPERSEDES:

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N.E. = NOT ESTABLISHED

N.A. = NOT APPLICABLE