



Material Safety Data Sheet

SECTION 1 IDENTIFICATION

Product Name: SPECTRO™ Brake Cleaner

Manufacturer:
Intercontinental Lubricants Corp./
Spectro Oils of America
 993 Federal Road
 Brookfield, CT 06804
 (203) 775-1291 Fax: (203) 775-8720

MSDS Date of Preparation: 8/24/98

SECTION 2 PRODUCT COMPONENTS

INGREDIENTS	CAS#.	WT.%	EXPOSURE LIMITS
Acetone (ACGIH)	67-64-1	30-50%	500 ppm TWA 750 ppm TWA STEL (ACGIH) 1000 ppm TWA (OSHA)
n-Hexane	110-54-3	30-40%	50 ppm TWA (ACGIH) 500 ppm TWA (OSHA)
Xylene (OSHA/ACGIH)	1330-20-7	10-20%	100 ppm TWA 150 ppm STEL (ACGIH)
Methanol	67-56-1	1-5%	200 ppm TWA skin (ACGIH) 200 ppm TWA (OSHA) 250 STEL (ACGIH)
Carbon Dioxide (OSHA/ACGIH)	124-38-9	1-5%	5,000 ppm TWA 30,000 ppm STEL (ACGIH)

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This product is a clear, colorless liquid with a sweet ketone odor. Flammable aerosol (Flash Point <0°F). May cause eye and skin irritation. May be absorbed through the skin in harmful amounts. Breathing vapors may cause respiratory irritation and central nervous system effects including headache, dizziness, nausea, visual impairment, acidosis, confusion and coma. Accidental ingestion may cause gastrointestinal effects with irritation, nausea, vomiting, dizziness, coma and death. Aspiration into the lungs during ingestion or vomiting may cause lung damage. This product contains methanol which is poisonous and may cause blindness or death.

HEALTH HAZARDS:

INHALATION: Excessive inhalation of vapors or mists may cause upper respiratory tract irritation and central nervous system effects including headache, nausea, dizziness, drowsiness, weakness, confusion, visual disturbances, tingling, numbness and shooting pains in the hands and forearms, ringing in ears, difficulty in walking and coma. Respiratory arrest can occur leading to asphyxia. Prolonged inhalation of high concentrations can cause nervous system, kidney and liver damage.

SKIN CONTACT: May cause irritation. Prolonged or repeated contact may cause severe irritation. Xylene, n-hexane and methanol may be absorbed through the skin possibly resulting in symptoms similar to those listed under ingestion.

EYE CONTACT: Vapors may cause irritation. Liquid may cause severe irritation.

SECTION 3: HAZARDS IDENTIFICATION (continued)

INGESTION: Unlikely due to aerosol container. Swallowing may cause gastrointestinal disturbances including abdominal pain, belching, nausea, vomiting, dizziness, drowsiness, visual disturbances, coma or death. May cause central nervous system depression with unsteady gait and sedation. Aspiration into the lungs may occur during ingestion or vomiting may cause lung damage. Kidney and liver damage may also occur.

Contains methanol which is highly toxic and may produce severe acidosis, blindness or death. Visual effects from methanol include blurred vision, double vision, changes in color perception, restriction of visual fields and complete blindness.

CHRONIC EFFECTS OF OVEREXPOSURE: Long term inhalation exposure can cause chronic headache, chest pain, nausea, mental confusion, breathing difficulties and peripheral nerve damage with symptoms of numbness and tingling in the extremities. Prolonged or repeated contact with this product may possibly lead to irritation and dermatitis. Intentional misuse by deliberately concentrating and inhaling the product may be harmful or fatal.

CARCINOGENICITY: None of the components of this product are listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with chronic skin, kidney, liver and nervous system disorders may be at increased risk from exposure to this material. Breathing of vapor and/or mist may aggravate respiratory disorders.

SECTION 4 EMERGENCY and FIRST AID PROCEDURES

EYE CONTACT: Immediately flush eye with water for at least 15 minutes while lifting the upper and lower lids. Get medical attention.

SKIN CONTACT: Remove contaminated clothing immediately and launder before reuse. Wash thoroughly with soap and water. Get medical attention if irritation develops.

INHALATION: Remove victim to fresh air. If breathing has stopped give artificial respiration. If breathing is difficult have qualified personnel administer oxygen. Get medical attention.

INGESTION: Unlikely due to aerosol container. Do not induce vomiting. Rinse mouth out with water. Get immediate medical attention by calling a Poison Control Center or hospital emergency department.

SECTION 5 FIRE and EXPLOSION HAZARD DATA

FLASH POINT: <0°F/-18°C

METHOD: TCC

FLAMMABLE LIMITS: (vol % in air) LEL: 2.6% UEL: 12.2%

AUTOIGNITION TEMPERATURE: Not established

AEROSOL PROTECTION LEVEL (NFPA 30B): Level 3

EXTINGUISHING MEDIA: Water fog, dry chemical or carbon dioxide. Cool fire exposed containers with water.

SPECIAL FIREFIGHTING PROCEDURES: Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus. Use shielding to protect against bursting cans.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Extremely flammable. Contents under pressure. Keep away from heat and open flames. Vapors are heavier than air and may travel to a remote ignition source and flash back. Containers may rupture or explode at temperatures above 120°F.

SECTION 6 ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear appropriate protective equipment. Remove all sources of ignition. Ventilate area. Collect material for disposal using non-combustible absorbent material and place in a container suitable for flammable waste. Report spill as required by local and federal regulations.

SECTION 7 HANDLING and STORAGE

Extremely Flammable Aerosol.

Avoid contact with eyes, skin and clothing. Avoid breathing vapors and mists. Use with adequate ventilation. Wash thoroughly after handling. Remove contaminated clothing and launder before re-use. No smoking in use or storage area.

Protect containers from physical damage. Store in a cool, well ventilated area at temperatures below 120°F. Store away from direct sunlight. Do not incinerate containers.

Empty containers retain product residues. Do not cut, weld, braze, etc. on or near empty containers. Follow all MSDS precautions in handling empty containers.

SECTION 8 EXPOSURE CONTROLS and PERSONAL PROTECTION

RESPIRATORY PROTECTION: None needed under normal use conditions with adequate ventilation. If the TLV is exceeded use a NIOSH approved supplied air respirator (with escape bottle if required) or self-contained breathing apparatus. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

VENTILATION: Good general room ventilation (equivalent to outdoors) should be adequate under normal conditions. If the recommended exposure limit is exceeded, an explosion-proof mechanical ventilation such as local exhaust may be required.

GLOVES: Teflon or other impervious gloves are recommended where prolonged or repeated skin contact is likely.

EYE PROTECTION: Safety glasses or goggles recommended.

OTHER PROTECTIVE EQUIPMENT: Impervious apron, boots and other clothing are recommended if needed to avoid prolonged/repeated skin contact. Suitable washing facilities should be available.

SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

BOILING POINT (@ 760 mmHg): 130°F

SPECIFIC GRAVITY (H₂O=1): 0.758

VAPOR PRESSURE (@ 70°F mm Hg): 40

EVAPORATION RATE (Butyl Acetate =1): >1

APPEARANCE AND ODOR: Clear, colorless liquid, sweet ketone odor.

MELTING POINT: Not available

VOLATILE: 50%

(VAPOR DENSITY (AIR=1): >1

COEFFICIENT OF WATER/OIL: Not available

SECTION 10 STABILITY and REACTIVITY

STABILITY: This material is stable.

CONDITIONS TO AVOID: Avoid heat., sparks and open flames. Avoid exposure to temperatures above 120°F.

INCOMPATIBILITY: Strong oxidizing agents, acids and bases.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may yield carbon monoxide and carbon dioxide.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY VALUES:

Xylene	Oral rat LD50 4300 mg/kg Inhalation rat LC50 5000 ppm/4 hr Skin rabbit LD50 >1700 mg/kg
Acetone:	Oral rat LD50 5800 mg/kg Inhalation rat LC50 50,100 mg/m ³ /8 hr
Methanol:	Oral rat LD50 9100 mg/kg Inhalation rat LC50 145,000 ppm/1 hr Skin rabbit LD50 15,940 mg/kg
n-Hexane:	LD50 Oral rat: 28,710 mg/kg LC50 Inhalation rat: 48,000 ppm/4 hr.
Carbon Dioxide:	No data available

None of the components is listed as a carcinogen or suspect carcinogen by NTP, IARC or OSHA. Acetone and n-hexane have been positive in a mammal cell cytogenetic analysis. Methanol has been positive in bacterial and mammal cell assays. None of the components are known to cause sensitization in animals or humans. Xylene and methanol have been shown to cause embryofetal toxicity and birth defects in laboratory animals. Acetone has been found to cause adverse reproductive effects in laboratory animals at high doses. n-Hexane has been shown to cause embryofetal toxicity in laboratory animals.

SECTION 12: ECOLOGICAL INFORMATION

There is no ecotoxicity data available for this product at this time.

SECTION 13: DISPOSAL INFORMATION

WASTE DISPOSAL METHOD: This product is RCRA Hazardous Waste (Ignitable) if discarded in the purchased form. Dispose in accordance with federal, state and local regulations. Do not incinerate containers. Dispose in accordance with all local, state and federal regulations.

SECTION 14: TRANSPORTATION INFORMATION

DOT SHIPPING DESCRIPTION : Consumer Commodity, ORM-D
DOT HAZARD CLASSIFICATION: ORM-D
DOT LABELS REQUIRED (49CFR172.101): None
UN NUMBER: None

SECTION 15: REGULATORY INFORMATION

OSHA HAZARD CLASSIFICATION: Flammable, pressure hazard, irritant, toxic, target organ effects.

EPA SARA 302: This product does not contain chemicals regulated under SARA Section 302.

EPA SARA 311 HAZARD CLASSIFICATION: Acute health, chronic health, fire hazard, sudden pressure release.

EPA SARA 313: This product contains the following chemicals that are regulated under SARA Title III, section 313:

n-Hexane	110-54-3	30-40%
Xylene	1330-20-7	10-20%
Methanol	67-56-1	4%

SECTION 15: REGULATORY INFORMATION (continued)

CERCLA Hazardous Substances (Section 103)/RQ: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Xylene (20% maximum) of 100 lbs, is 500 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

WHMIS CLASSIFICATION: Class B-5: Flammable aerosol; Class D-2, Subdivision B: Toxic material causing other chronic effects.

EU CLASSIFICATION: Highly Flammable (F) , Harmful (Xn)

EU RISK AND SAFETY PHRASES: R11, R20/21/22, R38, R48/20, S2, S16, S36/37, S51

TOXIC SUBSTANCES CONTROL ACT: All of the components of this product are listed on the TSCA inventory.

CALIFORNIA PROPOSITION 65: This product is not known to contain any chemicals which are known to the State of California to cause cancer or reproductive harm.

Canada: All of the components of this product are listed on the Canadian Domestic Substances List (DSL).

EEC EINECS: All of the ingredients are listed on the EINECS inventory.

Japan MITI: All of the ingredients of this product are listed on the Japanese Existing and New Chemical Substances (MITI) List.

Australia: All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances.

SECTION 16: OTHER INFORMATION

NFPA Rating: Health: 2 Fire: 4 Reactivity: 0