

**CASTROL NORTH AMERICA INC.
CONSUMER
MATERIAL SAFETY DATA SHEET**

SECTION I: IDENTITY

Product/Material Name: Bombardier FORMULA XP-S II

Chemical Name: Mixture

Chemical Family/Classification: Petroleum hydrocarbon

Molecular Weight: NA

Chemical Formula: NA

Material Use: 2-Stroke Oil

HMIS HAZARD RATING:

[0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe]

Health: 1

Flammability: 2

Reactivity: 0

WARNING STATEMENTS (If Applicable):

CAUTION! COMBUSTIBLE LIQUID AND VAPOR Avoid inhalation and skin contact

MANUFACTURER'S/ SUPPLIER NAME & ADDRESS:

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IN THE EVENT OF AN EMERGENCY PLEASE CALL: BP Emergency Response Center 1-800-321-8642

Date Prepared/Updated: 07/16/2003

Preparer:Regulatory, Environmental, Safety Department

Telephone: (973) 633-2200

SECTION II: PRODUCT/HAZARDOUS INGREDIENT INFORMATION

INGREDIENTS - CHEMICAL/Common Name	EXPOSURE LIMITS-TLV	LD ₅₀	LC ₅₀	%
Proprietary Synthetic Diesters and Polyol Esters [CASRN NA, mixture]	5 mg/m ³ recommended	ND	ND	60-80
Petroleum distillate [CASRN 64742-47-8]	1250 mg/m ³ recommended	Oral, rat: > 8000 mg/kg Dermal, rat: > 4000 mg/kg	Inhalation, 4 hr., rat: > 1400 ppm.	10-30
Severely refined petroleum basestocks. May contain one or more of the following CASRN 64741-88-4; 64742-54-7	PEL/TWA: 5 mg/m ³ , mist (OSHA, ACGIH) STEL: 10 mg/m ³ , mist (ACGIH)	Oral, rat: > 5 g/kg	Inhalation, 4 hr., rat: > 5000 mg/m ³	5-10
Multi-functional additive blend consisting of ashless dispersant, anti-oxidant and pour point depressant [CASRN NA, mixture]	ND	ND	ND	5-10

NOTE:

Product contains no materials currently classified as carcinogenic per the Annual Report of the National Toxicology Program [NTP], OSHA Hazard Communication Standard or the International Agency for Research on Cancer [IARC, Groups 1, 2A or 2B].

SECTION III: FIRST AID MEASURES

Signs/Symptoms: Transient eye irritation, redness, tearing.

Eye contact: Flush with clear water for at least 15 minutes or until any irritation subsides. If irritation persists, seek medical attention.

Skin contact: Remove contaminated clothing and wash before reuse. Wipe excess material from skin. Wash exposed area with soap and water.

Inhalation: If irritation or drowsiness occur, move the person to fresh air. Administer respiratory assistance if breathing is difficult or stops; Consult a physician.

Ingestion: Give plenty of water or other mild drinkable fluids and call a physician immediately. Do not induce vomiting without express consent of medical personnel.

SECTION IV: HEALTH HAZARD DATA

Exposure Limits:

See Section II, Product/Ingredient Information.

PRIMARY ROUTES OF ENTRY:

- Eye Contact
- Skin Contact
- Skin Absorption
- Inhalation (Acute)
- Inhalation (Chronic)
- Ingestion

EFFECTS OF EXPOSURE**Acute - (Evaluation based on components and/or similar products)**

Eyes: Contact may cause mild eye irritation. Not expected to cause prolonged or significant eye irritation.

Skin: Contact may cause mild skin and irritation. Not expected to cause prolonged or significant skin irritation.

Respiratory system: Vapors or mists in excess of permissible concentrations may cause irritation of nose and throat, headache, nausea and drowsiness.

Ingestion: Slight to moderate toxicity. Ingestion of small amounts may produce irritation and diarrhea. Ingestion of large amounts may cause generalized depression, headache, drowsiness, nausea, vomiting or diarrhea. Possible risk of aspiration of product into lungs.

Chronic -

Prolonged or repeated skin contact may cause skin drying, cracking, irritation, defatting, sensitization, and dermatitis. Repeated, excessive exposure to mists or fumes may induce pulmonary irritation or chronic bronchitis.

The product contains petroleum baseoils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils require a cancer warning under the OSHA Hazard Communication Standard [29 CFR 1910.1200]. These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Medical Conditions Generally Aggravated by Exposure: Pre-existing skin disorders.

TOXICOLOGY DATA (Product)**Acute Data (Median Lethal Dose - species)**

- Oral LD₅₀ - rat:** ND
- Dermal LD₅₀ - rabbit:** ND
- Inhalation LC₅₀ - rat:** ND

Irritancy Data

- Eye irritation - rabbit:** ND
- Skin irritation - rabbit:** ND
- Sensitization - guinea pig:** ND

Other: No data regarding presence of carcinogenicity, tetragenicity, mutagenicity, respiratory toxicity, sensitizing ability or synergistic substances.

SECTION V: EMPLOYEE PROTECTION

Ventilation:

No special ventilation is usually necessary. However, if operating conditions may create high airborne concentrations of this material, special or local ventilation may be needed.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: None required under normal use. If exposure is expected to exceed occupational exposure limits, use a NIOSH-approved respirator to prevent overexposure. In accordance with 29 CFR 1910.134, use either an atmosphere supplying respirator or an air-purifying respirator for organic vapors and particulates.

Eye: Safety goggles or glasses.

Gloves (specify): Wear oil impervious type, such as neoprene, nitrile, polyvinylchloride, to minimize skin contact.

Clothing: No special requirement; Normal work clothing. A coverall or apron may be used to minimize skin contact

Footwear: No special requirement.

Other: NA

Work/Hygienic Practices: Avoid prolonged and repeated skin contact. Do not wear contaminated clothing; Launder before reuse or discard. Wash thoroughly with soap and water after handling.

Storage/Handling: Keep containers closed when not in use. Do not store near heat, sparks, flame or strong oxidants. Avoid breathing mist. Maintain adequate ventilation. Avoid prolonged or repeated contact with skin.

Maintain storage below 150°F (66°C).

SECTION VI: PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: ND

Specific Gravity (Water=1): 0.93

Vapor Pressure (mm.Hg. @ 25 °C): ND

Vapor Density (Air=1): > 1

Percent Volatiles: 10-20 %

Evaporation Rate(BuAc=1): < 1

Solubility in Water: Negligible

Freezing Point: -65°F (-54°C)

H-Value: NA

Viscosity @ 100°C, cSt.: 7.4 typ.

Odor Threshold: ND

Coefficient of Water/Oil Distribution: ND

Appearance, Odor & Physical State: Dark liquid; mild petroleum odor

SECTION VII: FIRE AND EXPLOSION DATA

FLAMMABILITY Yes [X] No [] NFPA Class IIIA material - Combustible liquid

Flash Point (PMCC): 190°F (88°C) min.

Fire Point (PMCC): 190°F (88°C) min.

Autoignition Temperature: ND

Flammability limits in Air, % Vol.: Upper - 6.0 Lower - 1.0

Extinguishing Media:

CO₂, dry chemical, foam and water fog. Do not use water jets.

Special Firefighting Procedures/Unusual and Explosion Hazards:

Material must be preheated to burn. Do not enter confined areas without full protective equipment, including a positive pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water.

EXPLOSION DATA

Sensitivity to Mechanical Impact: NA

Sensitivity to Static Discharge: NA

SECTION VIII: REACTIVITY

Stability: Stable at ambient temperatures

Hazardous Polymerization: Will not occur.

Conditions and Materials to Avoid (Incompatibilities):

Heat, open flame and oxidizing materials.

Hazardous Combustion or Decomposition Products:

Smoke, fumes, oxides of carbon

SECTION IX: ENVIRONMENTAL PROTECTION

CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300, 24 hrs. for U.S. transportation related spills, leaks, fire, exposure or accident.

CANUTEC EMERGENCY PHONE NUMBER: (613) 996-6666, 24 hrs. for Canadian transportation related spills, leaks, fire, exposure or accident.

Spill or Leak Procedures:

Use best engineering practices when attempting cleanup of a large spill.

Large spills - Wear respirator and protective clothing as appropriate. Remove sources of heat or ignition; Provide adequate ventilation. Stop source of leak if possible. Prevent entry into water sources. Dike and contain spill. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an inert absorbent such as clay, sand or other suitable materials; Store and dispose of properly. Where feasible and appropriate, remove contaminated soil.

Small spills - Soak up spill with an inert absorbent such as clay, sand or other suitable materials; Store in a closed container and dispose of properly. Provide adequate ventilation.

Regulatory spill reporting requirements may apply; Contact governmental agency or legal counsel for advice.

Waste Disposal Method:

If discarded as supplied, material does not meet RCRA characteristic definition of ignitability, corrosivity or reactivity and is not listed in 40 CFR 261.33. The toxicity characteristic has not been evaluated. Under RCRA, the applicable hazardous waste classification must be evaluated prior to disposal of the material. Use of the product, processing or contamination may render the resulting material hazardous.

All recovered material should be packaged, labeled, transported and disposed of or reclaimed in accordance with governmental regulations regarding air pollution, water pollution or health.

Don't pollute - Conserve Resources. Dispose of used oil properly.

CAUTION: Improper disposal or reuse of the empty container may be hazardous and illegal. Cutting or welding of empty containers may cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place. Refer to applicable governmental regulations.

SECTION X: REGULATORY INFORMATION

TRANSPORTATION

Special Shipping Information

When shipped in containers greater than 110 gallons US - Combustible liquid, NOS (petroleum distillates), 3, NA1993, PG III
Follow all requirements regarding transportation of a regulated material.

Not regulated under Canadian TDG Regulations

CHEMICAL CONTROL REGULATIONS:

TSCA Status: All components of this material appear on the Toxic Substance Control Act Chemical Substances Inventory.

CEPA Status: Some components of this mixture do not appear on the Canadian Domestic Substance List

Canadian Workplace Hazardous Material Identification System (WHMIS) Classification:

Material is a controlled product.

Class A - Compressed Gas

Class B-1 - Flammable Gases

Class B-2 - Flammable Liquids

Class B-3 - Combustible Liquids

Class B-4 - Flammable Solids

Class B-5 - Flammable Aerosols

Class B-6 - Reactive Flammable Materials

Class C - Oxidizing Material

Class D, Div. 1 - Materials Causing Immediate and Serious Toxic Effects

Class D-1A - Very Toxic Material

Class D-1B - Toxic Material

Class D, Div. 2 - Materials Causing Other Toxic Effects

Class D-2A - Very Toxic Materials

Class D-2B - Toxic Materials

Class D-3 - Biohazardous Infectious Material

Class E - Corrosive Material

Class F - Dangerously Reactive Material

EPCRA - Emergency Planning and Community Right to Know Act (SARA Title III):

Section 302/304 Extremely Hazardous Substance: NA

CERCLA Section 102(a) Hazardous Substance: NA

Section 311 Hazard Category

Acute (immediate)

Chronic (delayed)

Fire

Sudden Release of Pressure

Reactive

Not applicable

Section 313 Toxic Release Inventory Chemical/Category:

No toxic chemical is present above de minimis quantities.

U.S. STATE RIGHT TO KNOW LAWS

New Jersey Worker and Community Right to Know Act, N.J.A.C. 8:59-5 Labelling Information: Petroleum Oil (2-Stroke Oil).

NOTICE:

The information presented herein is compiled from sources considered to be dependable, believed to be accurate to the best of Castrol's knowledge, and offered in good faith for the purpose of hazard communication. Because product use is beyond our control, no warranty is given, expressed or implied. Castrol Inc. cannot assume any liability for the use of information contained herein. To determine applicability or effect of any law or regulation with respect to the product, users should consult a legal advisor or appropriate governmental agency.
