

# MATERIAL SAFETY DATA SHEET

Abbreviations used on this Material Safety Data Sheet:

N/av. = Not available, N/ap. = Not applicable, ppm = parts per million, TLV = Threshold Limit Value.

NFPA Hazard Rating: 4 - Extreme, 3 - High, 2 - Moderate, 1 - Slight, 0 - None, X - Blank

WHMIS HAZARD: B2, D-2A

NFPA HAZARD RATING:

HEALTH - 1, FLAMMABILITY - 3, REACTIVITY - 0

## SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER: <b>Bi-Tron Fuel Conditioner</b>	
PRODUCT USE: <b>Performance Enhancer</b>	
mETAL: <b>Bi-Tron Marketing (NA) Ltd.</b>	SUPPLIERS NAME:
STREET ADDRESS: <b>100-12031 Horseshoe Way</b>	
CITY: <b>Richmond</b> PROVINCE: <b>B.C.</b>	CITY: PROVINCE:
POSTAL CODE: <b>V7A 4V4</b> EMERGENCY TELEPHONE NUMBER: (FOR CHEMICAL EMERGENCIES ONLY) <b>(613) 996-6666</b>	POSTAL CODE: EMERGENCY TELEPHONE NUMBER:

## SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	%	CAS NUMBER	LETHAL DOSE (50%) OF INGREDIENT (SPECIFY SPECIES AND ROUTE)	LETHAL CONCENTRATION (50%) OF INGREDIENT (SPECIES AND ROUTE)	PERMISSIBLE EXPOSURE LIMIT TLV-TWA
<b>Polymer/Amine Blend</b>		<b>Proprietary</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>Aliphatic Petroleum Distillates</b>	<b>N/av.</b>	<b>64742-47-8</b>	<b>5000 mg/kg (oral/rat)</b>	<b>N/av.</b>	<b>10 mg/m<sup>3</sup> for oil mists</b>
<b>Aromatic Petroleum Distillates</b>	<b>&lt;5</b>	<b>64742-94-5</b>	<b>&gt; 5000 mg/kg (oral/rat)</b>	<b>1400 ppm/4h (rat)</b>	<b>10 mg/m<sup>3</sup> for oil mists</b>
<b>Xylene</b>		<b>1330-20-7</b>		<b>100 ppm/150 ppm</b>	
<b>Ethyl Benzene</b>		<b>100-41-4</b>		<b>100/125 ppm</b>	
<b>Naphtalene</b>		<b>91-20-3</b>		<b>10/15 ppm</b>	

## SECTION 3 - PHYSICAL DATA

PHYSICAL STATE: <b>Liquid</b>	ODOUR AND APPEARANCE: <b>Non-viscous clear green liquid, slight alcoholic odour</b>		ODOUR THRESHOLD (ppm): <b>3-610ppm</b>
VAPOUR PRESSURE: <b>&lt;1.0</b> (mm Hg)	VAPOUR DENSITY: <b>&lt;1.0@20 °C</b> (Air = 1)	EVAPORATION RATE: <b>Slower than ether @20 °C</b>	BOILING POINT: <b>82 °C approx</b>
FREEZING POINT: <b>N/av.</b>	COEFFICIENT OF WATER/OIL DISTRIBUTION: <b>Partially soluble in water</b>	% VOLATILES: <b>85-90</b>	
pH: <b>N/ap. (organic matrix)</b>	SPECIFIC GRAVITY: <b>&lt;1.0@21 °C</b> (Water = 1)		

## SECTION 4 - FIRE AND EXPLOSION DATA

FLAMMABILITY IF YES, UNDER WHICH CONDITIONS? YES <input checked="" type="checkbox"/> NO	<b>Flammable. At slightly elevated temperatures, vapours may travel along the ground and be ignited by any ignition source. Never weld on or near any container. Ground any container larger than 5 gallons before transferring.</b>		
MEANS OF EXTINCTION:	<b>Smother with dry chemical powder, foam, carbon dioxide, or water fog.</b>		
SPECIAL PROCEDURES:	<b>Fire fighters must wear self-contained breathing apparatus and protective clothing. Decontaminate clothing with water before removal.</b>		
FLASHPOINT AND METHOD: <b>15°C</b>	UPPER FLAMMABILITY LIMIT: (% BY VOLUME) <b>8.0%</b>	LOWER FLAMMABILITY LIMIT: (% BY VOLUME) <b>1.0%</b>	
AUTOIGNITION TEMPERATURE: <b>455.6 °C</b>	HAZARDOUS COMBUSTION PRODUCTS: <b>Hydrogen, carbon dioxide and elemental carbon</b>		
EXPLOSION DATA: SENSITIVITY TO IMPACT:	<b>None identified</b>		SENSITIVITY TO STATIC DISCHARGE: <b>None identified</b>

## SECTION 5 - REACTIVITY DATA

CHEMICAL STABILITY IF NO, UNDER WHICH CONDITIONS? YES <input checked="" type="checkbox"/> NO	<b>Stable under normal conditions of use.</b>
INCOMPATIBILITY WITH OTHER SUBSTANCES IF YES, WHICH ONE? YES <input checked="" type="checkbox"/> NO	<b>Direct sources of heat and ignition. May react vigorously with alkali and alkaline earth metals. Avoid contact with oxidizing agents, strong acids or bases.</b>
REACTIVITY, AND UNDER WHAT CONDITIONS? <b>None, stable</b>	
HAZARDOUS DECOMPOSITION PRODUCTS:	<b>Carbon dioxide and carbon when heated in excess of 200 °C for prolonged periods.</b>
PRODUCT IDENTIFIER:	<b>Bi-Tron Fuel Conditioner</b>

## SECTION 6 - TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY:	SKIN CONTACT	SKIN ABSORPTION	EYE CONTACT	INHALATION	INGESTION
	<b>X</b>			<b>X</b>	<b>X</b>

**EFFECTS OF ACUTE EXPOSURE TO PRODUCT:**

Inhalation of vapours will cause discomfort and mild upper respiratory tract irritation. Prolonged inhalation will lead to lung damage. Skin irritation and temporary defatting may occur. Contact with the eye may cause immediate irritation causing redness. Ingestion may cause adverse health effects such as nausea and vomiting. Chemical pneumonitis may occur from aspiration of chemical which may be fatal.

**EFFECTS OF CHRONIC EXPOSURE TO PRODUCT:**

Prolonged exposure to this product may cause sensitization. There is no data to indicate that this material is carcinogenic in humans. Although there are no studies on humans, animal studies have indicated that repeated high dosages orally may result in damage to the liver, kidneys and thyroid.

EXPOSURE LIMITS:	IRRITANCY OF PRODUCT:	SENSITIZATION TO PRODUCT:	CARCINOGENICITY:
<b>TWA 8h= 350 ppm</b>	<b>As above.</b>	<b>As above</b>	<b>Not considered to be</b>
TERATOGENICITY:	REPRODUCTIVE TOXICITY:	MUTAGENICITY:	SYNERGISTIC PRODUCTS:
<b>No data</b>	<b>No data, but caution advised</b>	<b>Inconclusive test results</b>	<b>None known</b>

## SECTION 7 - PREVENTIVE MEASURES

**PERSONAL PROTECTIVE EQUIPMENT:**

GLOVES (SPECIFY):	RESPIRATOR (SPECIFY):	EYE (SPECIFY):
<b>If exposure is likely to be prolonged, use a barrier cream or wear PVC gloves.</b>	<b>Up to 2000 ppm, approved air supplied respirator, or full face respirator with organic vapour cartridge.</b>	<b>Safety goggles strongly recommended to avoid any irritation. Avoid use of contact lenses.</b>
FOOTWEAR (SPECIFY):	CLOTHING (SPECIFY):	OTHER (SPECIFY):
<b>As dictated by the work place.</b>	<b>If exposure to skin is likely, wear suitable protective clothing to protect from skin contact.</b>	<b>Emergency eye-wash and safety shower strongly recommended in work area.</b>

**ENGINEERING CONTROLS (SPECIFY, VENTILATION, ENCLOSED PROCESS):**

**Use good ventilation in the work area.**

**LEAK AND SPILL PROCEDURE:**

**Dam larger spills with sand or suitable absorbent. Place contaminated soil or absorbent in approved, compatible containers and label appropriately. Do not put liquid back into original container. Keep salvage containers tightly closed and away from heat or sources of ignition. For smaller spills, absorb with paper, vermiculite or other suitable absorbent.**

**WASTE DISPOSAL:**

**Consult national, provincial, and local regulations.**

**HANDLING PROCEDURES AND EQUIPMENT:**

**Avoid any handling procedure that may cause contact with eyes, or prolonged contact with skin.**

**STORAGE REQUIREMENTS:**

**Store in a cool, dry, well-ventilated area in the original containers. Keep containers away from direct sunlight. Do not store near foodstuffs.**

**SPECIAL SHIPPING INFORMATION:**

**Follow all WHMIS labelling requirements. Shipping description is:  
ROAD and AIR: FLAMMABLE LIQUID, N.O.S. (Petroleum Distillates), Class 3,  
UN 1993, P.G. II Ltd Quantities Exemption 1.17 in containers under 500mL**

**TDG UN NUMBER:**

**UN1993**

## SECTION 8 - FIRST AID MEASURES

**SPECIFIC MEASURES:**

**EYE CONTACT:** Flush with running water for at least 20 minutes, holding eyelids open. Get medical attention if irritation persists.

**SKIN CONTACT:** Remove contaminated clothing. Wash affected area with soap and water. Launder clothing before reusing. Get medical attention if irritation persists.

**INHALATION:** Remove victim to fresh air. Give artificial respiration if indicated. Get medical attention.

**INGESTION:** If patient is conscious, give three or four glasses of water. Do not induce vomiting. Do not give anything by mouth to a convulsing or unconscious person. Get medical attention.

**GENERAL ADVICE:** Good personal hygiene is essential. Avoid eating, smoking or drinking in work areas.

## SECTION 9 - PREPARATION DATE OF MSDS

PREPARED BY:	PHONE NUMBER:	DATE:
<b>Kel-Ex Agencies Ltd. with information supplied by Bitron International and CCINFO database.</b>	<b>Kel-Ex Agencies Ltd. (604) 986-4617 Bi-Tron Global (604) 244-8999</b>	<b>February 24, 2007</b>