

Delivering Global
Performance Solutions
since 1982



✓ **KEEPS WEAR IN CHECK**

METALON C2

Anti Wear Friction Fighter



PACKAGING

- > 12 x 250 ml
- > 4 Litre
- > 4 x 4 Litre
- > 20 Litre (Pail)
- > 205 Litre (Drum)

VCH Ventures

Authorized Dealer in Metalon Products

4787 – 68TH Ave. SE
Calgary, Alberta, T2C 5C1
Phone: 403.816.2408
Fax: 403.255.0374

Metalon Products

A div. of Professional Products of Canada Inc.

2624 Royal Windsor Drive, Unit 7
Mississauga, Ontario, L5J 1K7
Phone: 905.855.4826
Fax: 905.855.9900

Richard Distefano

President / CEO Metalon Products

5205 Blue Stem Court
Raleigh, North Carolina, 27606
Phone: 919.834.9444
Fax: 866.448.1421



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Anti Wear Friction Fighter

INFORMATION and ASTM/ENGINEERING DATA (Industrial Applications)

METALON C2 is distinctly different from any of the so-called "additives", which only try to improve the "film strength" of lubricants. In contrast, **METALON C2** is a **Metal Surface Treatment**. **METALON** combines chemically with the surfaces of bearing metals, (ferrous and non-ferrous), to form a microscopic monomolecular shield.

Logically, wear or material removal occurs when oil or grease films separate momentarily and metal is allowed to contact metal. The result: instant friction and removal of small amounts of material every time. This process, which is more or less frequent, (depending on the design of the equipment), adversely affects the equipment life and costly downtime for repairs.

Therefore, any additive that claims to improve 'lubrication film strength' is only marginally effective. Since lubrication films do separate and expose bare metal under load, any improvement is momentary. Costly wear and friction occur until the film is re-established.

With **METALON** chemically bonded in place, metal surfaces are protected against devastating "cold starts". Every time the lubrication film separates, the metal contact surfaces merely burnish (polish) each other instead of being ground away continuously. This burnishing action 'levels' the high spots and ridges, virtually increasing the contact surface area. **METALON** arrests excessive wear and the significant reduction of friction creates energy savings.

The uniqueness of **METALON C2** permits its use in a wide range of Industrial Applications. When blended with a gas-oil mixture for two-stroke power saws, Dyno Tests showed **METALON C2** increased the power by up to 10%, eliminated vapor lock and reduced vibration substantially. When applied to the most demanding Hydraulic Systems, such as; Hydraulic Cranes, Self-Loaders, Hydraulic Blenders and Pumping units, oil temperature drops of 50 °F are commonplace.

Since **METALON C2** contains no solvents or detergents, it performs extremely well in Compressors and other non-filtered systems. It is used with cutting, machining and metal-forming oils, resulting in faster production, smoother finished parts and greater tool life.

An initial **METALON C2** treatment is 5% by volume (up to 10% in severe applications, such as vibrators, compactors, areas of constant high heat, etc.). Future treatments of 2.5% by volume only, in areas where oil is changed regularly. All "sealed systems" (transmissions, hydraulics) require only one application, unless the oil is lost or changed. Then, 2.5% is applied to the new oil to maintain the chemical reservoir.

INSPECTION DATA:

(According to ASTM Specifications)

DESCRIPTION	ASTM METHOD	TEST RESULTS
Pour Point °F (°C)	D-97	-60 (-34)
Viscosity, SUS @ 100 °F (37.8 °C)	D-445	65.7 (11.92 cSt)
Specific Gravity @ 60 °F	D-1298	0.9692
Foaming Characteristics	D-892	0, 0, 0
Water Content (% by Volume)	D-96	0.00%
Ash Content (% by Weight)	D-482	0.01%

NOTE: The information and data presented herein are based on tests, reports and research we believe to be accurate and reliable. The information and data are provided without warranty, guarantee or liability on our part and are therefore, provided to customers for their own investigation, verification and consideration.

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A1:		Company Identification			
METALON PRODUCTS – A division of Professional Products of Canada Inc. 2624 Royal Windsor Drive, Unit 7, Mississauga, Ontario, L5J 1K7 Fax: (905) 855-9900 Tel: (905) 855-4826 Emergency No. (613) 996-6666					
A2:		Chemical Product			
METALON C2					
PRODUCT NAME		METALON C2			
CHEMICAL FORMULA		COMPLEX LUBRICANT			
PRODUCT FAMILY		ANTI-WEAR FRICTION FIGHTER			
MATERIAL USE		MECHANICAL/METAL SURFACES, FUEL TREATMENT TWO-STROKE ENGINES, HYDRAULICS			
T.D.G. CLASSIFICATION		NOT REGULATED			
B:		Composition/Information on Ingredients		C: Hazards Identification	
Hazardous Ingredients		%	T.L.V.	C.A.S. #	LD/50 Route, Species
RUST INHIBITOR, NOT REGULATED		1-10	NOT AVAILABLE	NOT APPLICABLE	NOT APPLICABLE
CHLORO ALKANES		10-40	5 mg/m3	63449-39-8	>4 g/kg ORAL
NAPHTHENIC OIL, NOT REGULATED		30-60	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
D:		First Aid Measures			
SKIN CONTACT		WASH AFFECTED AREA, REMOVE CONTAMINATED CLOTHING. IF IRRITATION PERSISTS, CONSULT A DOCTOR.			
EYE CONTACT		FLUSH EYES WITH LARGE QUANTITIES OF WATER FOR AT LEAST 15 MINUTES; GET MEDICAL ATTENTION.			
INHALATION		REMOVE VICTIM TO FRESH AIR. IF VICTIM IS NOT BREATHING, BEGIN ARTIFICIAL RESPIRATION IMMEDIATELY. GET IMMEDIATE MEDICAL ATTENTION.			
INGESTION		DILUTE WITH LARGE QUANTITIES OF WATER. DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL ATTENTION.			
E:		Fire Fighting Measures			
FLAMMABILITY		NOT APPLICABLE			
IF YES, UNDER WHICH CONDITIONS?		NOT APPLICABLE.			
MEANS OF EXTINGUISHING?		WATER FOG, CARBON DIOXIDE, DRY CHEMICAL, FOAM			
SPECIAL PROCEDURES		KEEP STORAGE CONTAINERS COOL IN FIRE VICINITY FIREFIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING			
FLASH POINT °C (°F)		>175 °C (348 °F) CLOSED CUP			
AUTO IGNITION TEMPERATURE		NOT AVAILABLE			
UPPER EXPLOSION LIMIT		NOT AVAILABLE			
LOWER EXPLOSION LIMIT		NOT AVAILABLE			
HAZARDOUS COMBUSTION PRODUCTS		OXIDES OF CARBON			
SENSITIVITY TO STATIC DISCHARGE		NO			
SENSITIVITY TO IMPACT		NO, NOT UNDER NORMAL HANDLING CONDITIONS			
F:		Accidental Release Measures			
LEAK/SPILL		SMALL SPILLS			
		STOP FLOW, CONTAIN MATERIAL, COLLECT IN PROPER CONTAINERS. REMOVE ALL SOURCES OF IGNITION. PROVIDE ADEQUATE VENTILATION.			
G:		Handling and Storage			
HANDLING PROCEDURES & EQUIPMENT		HANDLE AN OPEN CONTAINER WITH CARE. HANDLE AWAY FROM ALL SOURCES OF IGNITION. AVOID SMOKING. KEEP CONTAINER CLOSED.			
STORAGE NEEDS		KEEP AWAY FROM HEAT AND FLAME. KEEP FROM FREEZING. STORE AT ROOM TEMPERATURE IN WELL VENTILATED AREA.			
H:		Exposure Controls / Personal Protection			
PROTECTIVE EQUIPMENT					
GLOVES/TYPE		WEAR NEOPRENE GLOVES IF DIRECT CONTACT IS LIKELY			
RESPIRATORY/TYPE		WEARING OF NIOSH MASK APPROVED FOR ORGANIC VAPORS OR (SCBA), IF APPROPRIATE			
EYE/TYPE		SPLASH-PROOF SAFETY GOGGLES			
FOOTWEAR/TYPE		SAFETY BOOTS PER LOCAL REQUIREMENTS			
CLOTHING/TYPE		WEAR ADEQUATE PROTECTIVE CLOTHES			
OTHER/TYPE		EMERGENCY SHOWER AND EYE WASH STATION SHOULD BE IN CLOSE PROXIMITY TO WORK AREA			
ENGINEERING CONTROLS		LOCAL EXHAUST AT POINTS OF EMISSION			

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A2:	Chemical Product		
METALON C2			
I:	Physical and Chemical Properties		
PHYSICAL STATE	LIQUID	EVAPORATION RATE	NOT AVAILABLE
ODOR/APPEARANCE	MILD ODOR/AMBER, CLEAR	FREEZING POINT	NOT AVAILABLE
ODOR THRESHOLD	NOT AVAILABLE	SPECIFIC GRAVITY	1.0
VAPOR DENSITY (AIR=1)	NOT AVAILABLE	ph	NOT AVAILABLE
VAPOR PRESSURE	NOT AVAILABLE	BOILING POINT	NOT AVAILABLE
VOLATILES: % BY VOLUME	NOT AVAILABLE	SOLUBILITY IN WATER (20 °C)	INSOLUBLE
% BY WEIGHT	NOT AVAILABLE	COEFFICIENT WATER/OIL DIST	NOT AVAILABLE
J:	Stability and Reactivity		
CHEMICAL STABILITY	YES. PRODUCT IS STABLE. HAZARDOUS POLYMERIZATION WILL NOT OCCUR.		
COMPATIBILITY WITH OTHER SUBSTANCES	NO. WHICH CONDITIONS? YES		
REACTIVITY, WHAT CONDITIONS?	NO. WHICH PRODUCTS? STRONG OXIDIZERS AND REDUCING AGENTS		
HAZARDOUS PRODUCTS OF DECOMPOSITION	EXCESSIVE HEAT, STRONG OXIDIZERS, ACIDS AND BASES OXIDES OF CARBON.		
K:	Toxicological Information		
ROUTE OF ENTRY: SKIN CONTACT SKIN ABSORPTION EYE CONTACT INHALATION	POSSIBLE IRRITATION LOW ORDER OF TOXICITY IRRITATION VAPORS MAY CAUSE RESPIRATORY TRACT IRRITATION, NAUSEA, HEADACHE AND DIZZINESS.		
INGESTION	MAY CAUSE NAUSEA, VOMITING, DIARRHEA, CENTRAL NERVOUS SYSTEM DEPRESSION.		
EFFECTS OF CHRONIC EXPOSURE	CONJUNCTIVITIS, TRACHEITIS, DERMATITIS, NARCOSIS.		
EFFECTS OF ACUTE EXPOSURE	NO EVIDENCE OF ADVERSE EFFECTS		
LD/50 OF MATERIAL, SPECIES & ROUTE	SEE SECTIONS (B) & (C)		
LC/50 OF MATERIAL, SPECIES & ROUTE	SEE SECTIONS (B) & (C)		
EXPOSURE LIMIT OF MATERIAL	SEE SECTIONS (B) & (C)		
IRRITATION CAUSED BY MATERIAL	SEE EFFECTS OF ACUTE EXPOSURE, SEE ROUTE OF ENTRY		
SENSITIZING CAPABILITY OF MATERIAL	IN SUSCEPTIBLE INDIVIDUALS		
CARCINOGENICITY OF MATERIAL	NONE KNOWN		
REPRODUCTIVE EFFECTS	NONE KNOWN		
MUTAGENICITY	NONE KNOWN		
TERATOGENICITY	NONE KNOWN		
SYNERGISTIC MATERIALS	NONE KNOWN		
L:	Ecological Information		
LEAK/SPILL	LARGE SPILLS:	PREVENT RUN-OFF INTO DRAINS, SEWERS AND WATERWAYS. WEAR PROTECTIVE EQUIPMENT TO PROTECT AGAINST HAZARDS & DISPOSE AS PER APPROVED LOCAL WASTE DISPOSAL METHOD. FOLLOW INSTRUCTIONS FOR SMALL SPILLS	
M:	Disposal Considerations		
WASTE DISPOSAL, METHOD & EQUIPMENT	IN ACCORDANCE WITH MUNICIPAL, PROVINCIAL AND FEDERAL REGULATIONS.		
N:	Transport Information		
T.D.G. CLASSIFICATION:	NOT REGULATED		
O:	Regulatory Information		
THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.			
P:	Other Information		
NOTE: This information and data are based on tests, reports and research we believe to be accurate and reliable. It is provided herein without warranty, guarantee or liability on our part, and are therefore provided to customers for their own investigation, verification and consideration.			