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## METALON HI-TECH EP 1.5 GREASE

Superior Multi-use High Temperature Friction Fighter



### PACKAGING

- > 10 x 400 gm
- > 60 x 400 gm
- > 20 kg ( Pail )
- > 55 kg ( Keg )
- > 180 kg ( Drum )

#### VCH Ventures

Authorized Dealer in Metalon Products

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Calgary, Alberta, T2C 5C1  
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#### Metalon Products

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#### Richard Distefano

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## METALON HIGH-TECH EP 1.5 GREASE

### Superior Multi-use High Temperature Friction Fighter

#### INFORMATION and ASTM/ENGINEERING DATA

**METALON HI-TECH EP 1-5 GREASE** is a superior multi-use, high temperature, over-based complex lubricant. The principle of over-basing is not new. Calcium sulphonates have provided mechanical and thermal stability and exceptional resistance to water and corrosion for many years. However, the dispensing, pump-ability and low temperature properties were poor. Through sophisticated research in complexing methods, a new generation of grease has been developed, which offers extra bonuses.

The unique combination of this latest grease technology of over-based complex calcium sulphonates, PLUS 1.5 penetration, PLUS **METALON EP** offers characteristics and qualities unmatched by lithium or other greases. its penetration of **NLGI 1.5** bridges the #1 and #2 grades. reduces inventories and misapplication problems, while enhancing the pump-ability and dispensing properties.

**METALON HI-TECH EP 1.5 GREASE** protects against rust, corrosion, oxidation, water washout and displays excellent stability through temperatures ranging from -40 °C/F to 300 °C(>570 °F) and it is **reversible**. The **METALON** component of the formula will chemically bond to the metal contact surfaces, providing **residual anti-wear protection**, even when the grease is squeezed out.

**METALON HI-TECH EP 1.5 GREASE** is catalogued in the Canadian Government Cataloguing System, (CGCS) and assigned the **NATO Stock No. (NSN 9150-21-905-7275)**, and is listed at the **NATIONAL DEFENSE HEADQUARTERS**.

**TYPICAL USES:** Industrial. Farm Production and Construction Machinery, Automotive, Mining and Marine Equipment, Gears, Bearings, Stuffing Boxes, Automatic Lube Systems. Oven Conveyors, High/Low Speed Mechanisms, Military Equipment, Tractor Fifth Wheels and most other Grease Applications.

#### INSPECTION DATA:

(According to ASTM Specifications)

<u>DESCRIPTION</u>	<u>ASTM</u>	<u>RESULTS</u>
Dropping Off Point °F (°C)	D-2265	300(575)
<b>Shear Stability:</b>		
Penetration @ 25 °C	D-217	
Worked @ 60 Strokes		285-315
Worked @ 10,000 Strokes		1%
Worked @ 100,000 Strokes		2%
Worked @ 10,000 Strokes w/ 50% Water		285-315
<b>Roll Stability:</b>	D-1831	+3%
<b>Extreme Pressure:</b>		
Timken Value Kg/lb.	D-2509	34/75
4-Ball Wear Test	D-2266	
@ 40 kg-scar (mm)		0.32
LWI, kg	D-2783	70+
Weld Point, kg		500+
<b>Wheel Bearing Leakage:</b>		
gms. @ 325 °F (163 °C)	D-1263	0.4
<b>Water Washout:</b>		
@ 175 °F (79 °C), % Loss	D-1264	<3
<b>Rust, (1=Pass)</b>	D-1743	1,1,1
<b>Corrosion Resistance:</b>		
Copper Corrosion	D-1261	Pass
Bearing Corrosion	D-1743	Pass
<b>Oxidation (PSI Loss)</b>		
@ 100 hours	D-0942	0
@ 500 hours		2
@ 1000 hours		9
<b>Low Temp. Torque</b>		
@ -40 °F (-40 °C)	D-1478	8.0
After 5 minutes		3.7
After 10 minutes		3.5
<b>Base Oil:</b>		
Viscosity, SUS		
@ 100 °F (40.0 °C)	D-2161	600 (cSt)
@ 210 °F (100 °C)	D-2161	70 (cSt)
Pour Point °F (°C)	D-97	+2 (-17)
Flash Point °F (°C)	D-92	475 (245)
<b>Colour-Texture:</b>		Blue, Buttery & Smooth

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					
<b>METALON PRODUCTS – A division of Professional Products of Canada Inc.</b> <b>2624 Royal Windsor Drive, Unit 7, Mississauga, Ontario, L5J 1K7</b> <b>Fax: (905) 855-9900 Tel: (905) 855-4826 Emergency No. (613) 996-6666</b>						
A2:	Chemical Product					
<b>METALON HI-TECH EP 1.5 GREASE</b>						
PRODUCT NAME	METALON HI-TECH EP 1.5 GREASE					
CHEMICAL FORMULA	COMPLEX LUBRICANT					
PRODUCT FAMILY	ANTI-WEAR FRICTION FIGHTER					
MATERIAL USE	GREASE LUBRICATION					
T.D.G. CLASSIFICATION	NOT REGULATED					
B:	Composition/Information on Ingredients			C:	Hazards Identification	
<b>Hazardous Ingredients</b>	<b>%</b>	<b>T.L.V.</b>	<b>C.A.S. #</b>	<b>LD/50 Route, Species</b>	<b>LC/50 Route, Species</b>	
OVER-BASED CALCIUM SULFONATE	70-90	NOT APPLICABLE	NOT APPLICABLE	NOT AVAILABLE	NOT AVAILABLE	
CHLORO ALKANES	5-30	5 mg/m3	63449-39-8	>4 g/kg ORAL	NOT AVAILABLE	
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)	>235 °C (455 °F) CLOSED CUP					
AUTO IGNITION TEMPERATURE	NOT AVAILABLE					
UPPER EXPLOSION LIMIT	NOT APPLICABLE					
LOWER EXPLOSION LIMIT	NOT APPLICABLE					
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	WEAR NEOPRENE GLOVES IF DIRECT CONTACT IS LIKELY					
GLOVES/TYPE	WEARING OF NIOSH MASK APPROVED FOR ORGANIC VAPORS OR (SCBA), IF APPROPRIATE					
RESPIRATORY/TYPE	SPLASH-PROOF SAFETY GOGGLES					
EYE/TYPE	SAFETY BOOTS PER LOCAL REQUIREMENTS					
FOOTWEAR/TYPE	WEAR ADEQUATE PROTECTIVE CLOTHES					
CLOTHING/TYPE	EMERGENCY SHOWER AND EYE WASH STATION SHOULD BE IN CLOSE PROXIMITY TO WORK AREA					
OTHER/TYPE	LOCAL EXHAUST AT POINTS OF EMISSION					
ENGINEERING CONTROLS						

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A2:	Chemical Product		
<b>METALON HI-TECH EP 1.5 GREASE</b>			
I:	Physical and Chemical Properties		
PHYSICAL STATE	PASTE	EVAPORATION RATE	NOT AVAILABLE
ODOR/APPEARANCE	PLEASANT/ GLOSSY BLUE	FREEZING POINT	NOT AVAILABLE
ODOR THRESHOLD	NOT AVAILABLE	SPECIFIC GRAVITY	1.0
VAPOR DENSITY (AIR=1)	NOT AVAILABLE	ph	NOT APPLICABLE
VAPOR PRESSURE	< 5 mg Hg	BOILING POINT	NOT AVAILABLE
VOLATILES: % BY VOLUME	0.00%	SOLUBILITY IN WATER (20 °C)	INSOLUBLE
% BY WEIGHT	0.00%	COEFFICIENT WATER/OIL DIST	NOT APPLICABLE
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		
<b>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.</b>			