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**MATERIAL SAFETY DATA SHEET**

PRODUCT TRADE NAME: Lube-A-Cyl®	PTFE/PETROLEUM GREASE	PAGE 1 OF 5
EFFECTIVE DATE: JANUARY 1, 2013		

THIS MATERIAL SAFETY DATA SHEET CONTAINS ENVIRONMENTAL, HEALTH AND TOXICOLOGY INFORMATION FOR YOUR EMPLOYEES. PLEASE MAKE SURE THIS INFORMATION IS GIVEN TO THEM. IT ALSO CONTAINS INFORMATION TO HELP YOU MEET COMMUNITY RIGHT-TO-KNOW/EMERGENCY RESPONSE REPORTING REQUIREMENTS UNDER SARA TITLE 111 AND MANY OTHER LAWS. IF YOU RESELL THIS PRODUCT, THIS MSDS MUST BE GIVEN TO THE BUYER OR THE INFORMATION INCORPORATED IN YOUR MSDS.

<u>1. COMPOSITION/INFORMATION ON INGREDIENTS</u>	<u>CAS NUMBER</u>	<u>PERCENTAGE</u>
LUBRICATING BASE OIL SEVERELY REFINED PETROLEUM DISTILLATE ACGIH-TLV-5MG/M CUBED 10MG/M3 (MIST) ACGIH STEL	*SEE BELOW	78%
ORGANIC POLYUREA THICKENER (TSCA PROPRIETY COMPOUND EPA FILE #26847 NON-HAZARDOUS)		15-20%
PTFE (PolyTetraFluoroEthylene)	#9002-84-0	1-5%

\*THE BASE OIL MAY BE A MIXTURE OF ANY OF THE FOLLOWING: CAS 64741884, CAS 641895, CAS 6471964, CAS 64741975, CAS 64742014, CAS 64742525, CAS 64742536, CAS 64742547, CAS 64742627, CAS 64742650 OR CAS 72623837.

COMPOSITION COMMENT:

ALL THE COMPONENTS OF THIS MATERIAL ARE ON THE TOXIC SUBSTANCES CONTROL ACT CHEMICAL SUBSTANCES INVENTORY.

THIS PRODUCT FITS THE ACGIH DEFINITION FOR MINERAL OIL MIST. THE ACGIH TLV IS 5 MG/M3, THE OSHA PEL IS 5 MG/M3.

**2. HAZARDS IDENTIFICATION**

POTENTIAL HEALTH EFFECTS:

EYE:

NOT EXPECTED TO CAUSE PROLONGED OR SIGNIFICANT EYE IRRITATION.

SKIN:

CONTACT WITH THE SKIN IS NOT EXPECTED TO CAUSE PROLONGED OR SIGNIFICANT IRRITATION. SKIN CONTACT MAY CAUSE DRYING OR DEFATTING OF THE SKIN. NOT EXPECTED TO BE HARMFUL TO INTERNAL ORGANS IF ABSORBED THROUGH THE SKIN.

HIGH-PRESSURE EQUIPMENT INFORMATION:

ACCIDENTAL HIGH-VELOCITY INJECTION UNDER THE SKIN OF MATERIALS OF THIS TYPE MAY RESULT IN SERIOUS INJURY. SEEK MEDICAL ATTENTION AT ONCE SHOULD AN ACCIDENT LIKE THIS OCCUR. THE INITIAL WOUND AT THE INJECTION SITE MAY NOT APPEAR TO BE SERIOUS AT FIRST; BUT, IF LEFT UNTREATED, COULD RESULT IN DISFIGUREMENT OR AMPUTATION OF THE AFFECTED PART.

INGESTION:

IF SWALLOWED, THIS SUBSTANCE IS CONSIDERED PRACTICALLY NON-TOXIC TO INTERNAL ORGANS.

INHALATION:

NOT EXPECTED TO BE HARMFUL IF INHALED. CONTAINS A PETROLEUM-BASED MINERAL PROLONGED OR REPEATED INHALATION OF OIL MIST AT AIRBORNE LEVELS ABOVE THE RECOMMENDED MINERAL OIL MIST EXPOSURE LIMIT.

SIGNS AND SYMPTOMS OF EXPOSURE:

SKIN DEFATTING: MAY INCLUDE DRYING AND REDDENING OF THE SKIN.

**3. FIRST AID MEASURES**

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EYE:

NO SPECIFIC FIRST AID MEASURES ARE REQUIRED BECAUSE THIS MATERIAL IS NOT EXPECTED TO CAUSE EYE IRRITATION. AS A PRECAUTION REMOVE CONTACT LENSES IF WORN AND FLUSH EYES WITH WATER.

SKIN:

REMOVE CONTAMINATED CLOTHING AND SHOES. USE A WATERLESS HAND CLEANER, MINERAL OIL OR PETROLEUM JELLY TO REMOVE THE MATERIAL. THEN WASH SKIN WITH SOAP AND WATER. WASH OR CLEAN CONTAMINATED CLOTHING AND SHOES BEFORE REUSE.

INGESTION:

NO SPECIFIC FIRST AID MEASURES ARE REQUIRED BECAUSE THIS MATERIAL IS NOT EXPECTED TO BE HARMFUL IF SWALLOWED. DO NOT INDUCE VOMITING. AS A PRECAUTION, GIVE THE PERSON A GLASS OF WATER OR MILK TO DRINK AND GET MEDICAL ADVICE. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

INHALATION:

IF EXPOSED TO EXCESSIVE LEVELS OF MATERIAL IN THE AIR, MOVE THE EXPOSED PERSON TO FRESH AIR. GET MEDICAL ATTENTION IF COUGHING OR RESPIRATORY DISCOMFORT OCCURS.

NOTE TO PHYSICIANS:

IN AN ACCIDENT INVOLVING HIGH-PRESSURE EQUIPMENT, THIS PRODUCT MAY BE INJECTED UNDER THE SKIN. SUCH AN ACCIDENT MAY RESULT IN A SMALL SOMETIMES BLOODLESS, PUNCTURE WOUND.

HOWEVER, BECAUSE OF ITS DRIVING FORCE, MATERIAL INJECTED INTO A FINGERTIP CAN BE DEPOSITED INTO THE PALM OF THE HAND. WITHIN 24 HRS., THERE IS USUALLY A GREAT DEAL OF SWELLING, DISCOLORATION AND INTENSE THROBBING PAIN. IMMEDIATE TREATMENT AT A SURGICAL EMERGENCY CENTER IS RECOMMENDED.

**4. FIRE FIGHTING MEASURES**

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FIRE CLASSIFICATION:

CLASSIFICATION (29 CFR 1910.1200): NOT CLASSIFIED BY OSHA AS FLAMMABLE OR COMBUSTIBLE.

FLAMMABLE PROPERTIES:

FLASH POINT: (CCC) 455F (-235C)

AUTOIGNITION: NDA

FLAMMABILITY LIMITS (% BY VOLUME IN AIR): LOWER: NA UPPER: NA

EXTINGUISHING MEDIA: CO<sub>2</sub>, DRY CHEMICAL, FOAM AND WATER FOG.

NFPA RATINGS: HEALTH 1, FLAMMABILITY 1, REACTIVITY 0.

FIRE FIGHTING INSTRUCTIONS:

THIS MATERIAL WILL BURN ALTHOUGH IT IS NOT EASILY IGNITED.

COMBUSTION PRODUCTS:

NORMAL COMBUSTION FORMS CARBON DIOXIDE, WATER VAPOR AND MAY PRODUCE OXIDES OF SULFUR, NITROGEN AND PHOSPHORUS. COMBUSTION MAY FORM OXIDES OF CALCIUM AND H<sub>2</sub>S. INCOMPLETE COMBUSTION CAN PRODUCE CARBON MONOXIDE.

**5. ACCIDENTAL RELEASE MEASURES**

CLEAN UP SPILLS IMMEDIATELY, OBSERVING PRECAUTIONS IN EXPOSURE CONTROLS/PERSONAL PROTECTION SECTION.

**6. HANDLING AND STORAGE**

HANDLING AND STORAGE: NO SPECIAL REQUIREMENTS.

**7. EXPOSURE CONTROLS/PERSONAL PROTECTION**

GENERAL CONSIDERATIONS:

CONSIDER THE POTENTIAL HAZARDS OF THIS MATERIAL (SEE HAZARDS IDENTIFICATION) APPLICABLE EXPOSURE LIMITS, JOB ACTIVITIES AND OTHER SUBSTANCES IN THE WORK PLACE WHEN DESIGNING ENGINEERING CONTROLS AND SELECTING PERSONAL PROTECTIVE EQUIPMENT. IF ENGINEERING CONTROLS OR WORK PRACTICES ARE NOT ADEQUATE TO PREVENT EXPOSURE TO HARMFUL LEVELS OF THIS MATERIAL, THE PERSONAL PROTECTIVE EQUIPMENT LISTED BELOW IS RECOMMENDED. THE USER SHOULD READ AND UNDERSTAND ALL INSTRUCTIONS AND LIMITATIONS SUPPLIED WITH THE EQUIPMENT SINCE PROTECTION IS USUALLY PROVIDED FOR A LIMITED TIME OR UNDER CERTAIN CIRCUMSTANCES.

**8. ENGINEERING CONTROLS:**

USE IN A WELL-VENTILATED AREA. IF USER OPERATIONS GENERATE AN OIL MIST, USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION OR OTHER ENGINEERING CONTROLS TO CONTROL AIRBORNE LEVELS BELOW THE RECOMMENDED MINERAL OIL MIST EXPOSURE LIMITS.

PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION:

NO SPECIAL EYE PROTECTION IS NORMALLY REQUIRED.

SKIN PROTECTION:

WEAR PROTECTIVE CLOTHING IF ENGINEERING CONTROLS OR WORK PRACTICES ARE NOT ADEQUATE TO PREVENT SKIN CONTACT. SELECTION OF PROTECTING CLOTHING MAY INCLUDE GLOVES, APRON, BOOTS AND COMPLETE FACIAL PROTECTION DEPENDING ON OPERATIONS CONDUCTED. SUGGESTED MATERIALS FOR PROTECTIVE GLOVES INCLUDE: NITRILE, VITON, SILVER SHIELD.

RESPIRATORY PROTECTION:

NO RESPIRATORY PROTECTION IS NORMALLY REQUIRED. IF USER OPERATIONS GENERATE AN OIL MIST, DETERMINE IF AIRBORNE CONCENTRATIONS ARE BELOW THE RECOMMENDED MINERAL OIL MIST EXPOSURE LIMITS. IF NOT, WEAR A NIOSH APPROVED RESPIRATOR THAT PROVIDES ADEQUATE PROTECTION FROM MEASURED CONCENTRATIONS OF THIS MATERIAL. USE THE FOLLOWING ELEMENTS FOR AIR-PURIFYING RESPIRATORS: PARTICULATE.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL DESCRIPTION: GREEN GREASE

p/H:	NDA
VAPOR PRESSURE:	NDA
VAPOR DENSITY:	(AIR=1)
BOILING POINT:	NDA
FREEZING POINT:	NDA
MELTING POINT:	NDA
SOLUBILITY:	SOLUBLE IN HYDROCARBON SOLVENTS; INSOLUBLE IN WATER.
SPECIFIC GRAVITY:	1.02 @ 15.5/15.6C
EVAPORATION RATE:	NA
VISCOSITY:	-100 SUS @ 100F
PERCENT VOLATILE (VOL)	NA

**10. STABILITY AND REACTIVITY**

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HAZARDOUS DISCOMPOSITION PRODUCTS:

NO DATA AVAILABLE

CHEMICAL STABILITY:

STABLE

CONDITIONS TO AVOID:

NO DATA AVAILABLE

INCOMPATIBILITY WITH OTHER MATERIALS:

MAY REACT WITH STRONG OXIDIZING AGENTS, SUCH AS CHLORATES, PEROXIDES, ETC.

HAZARDOUS POLYMERIZATION:

POLYMERIZATION WILL NOT OCCUR.

**11. TOXICOLOGICAL INFORMATION**

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EYE EFFECTS:

THE EYE IRRITATION HAZARD IS BASED ON DATA FOR A SIMILAR MATERIAL.

SKIN EFFECTS:

THE SKIN IRRITATION HAZARD IS BASED ON DATA FOR A SIMILAR MATERIAL.

ACUTE INHALATION EFFECTS:

THE ACUTE RESPIRATORY TOXICITY IS BASED ON DATA FOR A SIMILAR MATERIAL.

ADDITIONAL TOXICOLOGY INFORMATION:

THIS PRODUCT CONTAINS PETROLEUM BASE OILS WHICH MAY BE REFINED BY VARIOUS PROCESSES INCLUDING SEVERE SOLVENT EXTRACTION, SEVERE HYDROCRACKING, OR SEVERE HYDROTREATING. NONE OF THE OILS REQUIRES 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).

**12. ECOLOGICAL INFORMATION**

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ECOTOXICITY:

NO DATA AVAILABLE.

ENVIRONMENTAL FATE:

THIS MATERIAL IS NOT EXPECTED TO BE READILY BIODEGRADABLE.

**13. DISPOSAL CONSIDERATIONS**

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OIL COLLECTION SERVICES ARE AVAILABLE FOR USED OIL RECYCLING OR DISPOSAL. PLACE CONTAMINATED MATERIALS IN CONTAINERS AND DISPOSE OF IN A MANNER CONSISTENT WITH APPLICABLE REGULATIONS. CONTACT YOUR LOCAL ENVIRONMENTAL OR HEALTH AUTHORITIES FOR APPROVED DISPOSAL OR RECYCLING METHODS.

**14. TRANSPORT INFORMATION**

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TRANSPORTATION INFORMATION:

THE DESCRIPTION SHOWN MAY NOT APPLY TO ALL SHIPPING SITUATIONS. CONSULT 49CFR, OR APPROPRIATE DANGEROUS GOODS REGULATIONS, FOR ADDITIONAL DESCRIPTION REQUIREMENTS (E.G. TECHNICAL NAME AND MODE-SPECIFIC OR QUANTITY-SPECIFIC SHIPPING REQUIREMENTS).

DOT SHIPPING NAME:	NONE	DOT HAZARD CLASS:	NONE
DOT IDENTIFICATION #:	NONE	DOT PACKING GROUP:	N/A

ADDITIONAL INFO: PETROLEUM LUBRICATING GREASE - NOT HAZARDOUS BY US DOT.  
ADR/RID HAZARD CLASS - NOT APPLICABLE.

**15. REGULATORY INFORMATION**

SARA 311 CATEGORIES:	1. IMMEDIATE (ACUTE) HEALTH EFFECTS:	NO
	2. DELAYED (CHRONIC) HEALTH EFFECTS:	NO
	3. FIRE HAZARD:	NO
	4. SUDDEN RELEASE OF PRESSURE HAZARD:	NO
	5. REACTIVITY HAZARD:	NO

**16. FOOD CONTACT STATUS**

USDA: H-2 STATUS: THIS PRODUCT IS ACCEPTABLE TO THE USDA FOR USE AS A LUBRICANT IN OFFICIAL MEAT AND POULTRY ESTABLISHMENTS PROVIDED THERE IS NO POSSIBILITY OF THE LUBRICANT OR LUBRICATED PART CONTACTING EDIBLE PRODUCTS.

**17. OTHER INFORMATION**

NFPA RATINGS: HEALTH 1, FLAMMABILITY 1, REACTIVITY 0  
 HMIS RATINGS: HEALTH 1, FLAMMABILITY 1, REACTIVITY 0  
 (0-LEAST, 1-SLIGHT, 2-MODERATE, 3-HIGH, 4-EXTREME)

PPE - PERSONAL PROTECTION EQUIPMENT INDEX RECOMMENDATION - CHRONIC EFFECT INDICATOR. THESE VALUES ARE OBTAINED USING THE GUIDELINES OR PUBLISHED EVALUATIONS PREPARED BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) OR THE NATIONAL PAINT AND COATING ASSOCIATION (FOR HMIS RATINGS).

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

- |      |                             |     |                                    |
|------|-----------------------------|-----|------------------------------------|
| TLV  | - THRESHOLD LIMIT VALUE     | TWA | - TIME WEIGHTED AVERAGE            |
| STEL | - SHORT-TERM EXPOSURE LIMIT | TFQ | - THRESHOLD PLANNING QUANTITY      |
| RQ   | - REPORTABLE QUANTITY       | PEL | - PERMISSIBLE EXPOSURE LIMIT       |
| C    | - CEILING LIMIT             | CAS | - CHEMICAL ABSTRACT SERVICE NUMBER |
| A1-5 | - APPENDIX A CATEGORIES     | O   | - CHANGE HAS BEEN PROPOSED         |
| NDA  | - NO DATA AVAILABLE         | NA  | - NOT APPLICABLE                   |

THE ABOVE INFORMATION IS BASED ON THE DATA OF WHICH WE ARE AWARE AND IS BELIEVED TO BE CORRECT AS OF THE DATE HEREOF. SINCE THIS INFORMATION MAY BE APPLIED UNDER CONDITIONS BEYOND OUR CONTROL AND WITH WHICH WE MAY BE UNFAMILIAR AND SINCE DATA MADE AVAILABLE SUBSEQUENT TO THE DATE HEREOF MAY SUGGEST MODIFICATION OF THE INFORMATION, WE DO NOT ASSUME ANY RESPONSIBILITY FOR THE RESULTS OF ITS USE. THIS INFORMATION IS FURNISHED UPON CONDITIONS THAT THE PERSON RECEIVING IT SHALL MAKE HIS OWN DETERMINATION OF THE SUITABILITY OF THE MATERIAL FOR HIS PARTICULAR PURPOSE.

***For additional information please contact:***

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