# **MATERIAL SAFETY DATA SHEET**

Company Name:C.R. LAURENCE CO., INC.Address:2503 E. VERNON AVE.City / State / Zip:LOS ANGELES / CA / 90058

 US-CHEMTREC Phone(I):
 (800)424-9300

 US-CHEMTREC Phone(II):
 (703)527-3887

 CAN-CANUTEC Phone:
 (613)996-6666

 Vendor Update:
 3/14/2007

 Date Prepared:
 12/4/2007

 MSDS Number:
 GPL205;

### I. CHEMICAL PRODUCT IDENTIFICATION

**Product Name:** KRYTOX GREASE SYRINGE

HMIS Ratings:

Health: Slight(1)

Flammability: Minimal(0)
Instability/Reactivity: Minimal(0)

NFPA Ratings:

Health: Slight(1)

Flammability: Minimal(0)
Instability/Reactivity: Minimal(0)

Other: PERSONNEL PROTECTION RATING DEPENDS ON USE CONDITIONS.

II. COMPOSITION, INFORMATION ON INGREDIENTS							
Chemical Ingredients	C.A.S. Number	% By Weight	ACGIH TLV TWA/STEL	OSHA PEL TWA/STEL	Other TWA/STEL	LD50	LC50
PERFLUOROALKYLETHER	60164-51-4	73 – 82					
Notes							
PTFE	9002-84-0	18 – 27	NE	NE	DUPONT: 10 MG/M³, 8 HR TD; 5 MG/M³, 8 HR RD		
Notes	AEL IS DUPONT'S ACCEPTABLE EXPOSURE LIMIT. WHERE GOVERNMENTALLY IMPOSED OCCUPATIONAL EXPOSURE LIMITS WHICH ARE LOWER THAN THE AEL ARE IN EFFECT, SUCH LIMITS SHALL TAKE PRECEDENCE.						
Other:	TD: TOTAL DUST RD: RESPIRABLE DUST						

# **III. HAZARDS IDENTIFICATION PRIMARY ROUTE OF ENTRY**

EYE CONTACT MAY CAUSE EYE IRRITATION WITH DISCOMFORT, TEARING OR

BLURRING OF VISION.

**Skin:** SKIN CONTACT MAY CAUSE SKIN IRRITATION WITH DISCOMFORT OR RASH.

PROLONGED SKIN CONTACT MAY CAUSE REDNESS AND INFLAMMATION OF

THE HAIR FOLLICLES WITHOUT SKIN SENSITIZATION.

Inhalation: INHALATION OF FLUORINE COMPOUNDS RELEASED AS DECOMPOSITION

PRODUCTS ABOVE 290°C (554°F) MAY CAUSE LUNG IRRITATION AND PULMONARY EDEMA WHICH REQUIRE MEDICAL TREATMENT. INHALATION OF FUMES OR SMOKE FROM OVERHEATED OR BURNING GREASE MAY CAUSE POLYMER FUME FEVER, A TEMPORARY FLU–LIKE ILLNESS ACCOMPANIED BY FEVER, CHILLS, AND SOMETIMES COUGH, OF APPROXIMATELY 24 HOURS DURATION. REPEATED EPISODES OF POLYMER FUME FEVER MAY CAUSE

LUNG DAMAGE.

Medical Conditions
Aggravated by Exposure:

Other: CARCINOGENICITY INFO: NONE OF THE COMPOUNDS PRESENT IN THIS

MATERIAL AT CONCENTRATIONS EQUAL TO OR GREATER THAN 0.1% ARE LISTED BY IARC, NTP, OSHA OR ACGIH AS A CARCINOGEN.

**IV. FIRST AID MEASURES** 

Eyes: IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER

FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN.

Skin: FLUSH SKIN WITH WATER AFTER CONTACT. WASH CONTAMINATED

CLOTHING BEFORE REUSE.

Ingestion: IF SWALLOWED, DO NOT INDUCE VOMITING. IMMEDIATELY GIVE TWO

GLASSES OF WATER. NEVER GIVE ANYTHING BY MOUTH TO AN

UNCONSCIOUS PERSON. CALL A PHYSICIAN.

Inhalation: IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL

RESPIRATION. IF BREATHING IS DIFFICULET, GIVE OXYGEN. CALL A

PHYSICIAN.

**Other:** NOTE TO PHYSICIAN: ACTIVATED CHARCOAL MIXTURE MAY BE

ADMINISTERED. TO PREPARE ACTIVATED CHARCOAL MIXTURE, SUSPEND 50 GRAMS ACTIVATED CHARCOAL IN 400 ML WATER AND MIX THOROUGHLY.

ADMINISTER 5 ML/KG, OR 350 ML FOR AN AVERAGE ADULT.

**V. FIRE FIGHTING MEASURES** 

Flash Point: DOES NOT IGNITE

Test Method: PMCC

Lower Flammability Limit: NON COMBUSTIBLE

**Extinguishing Agents:** USE MEDIA APPROPRIATE FOR SURROUNDING MATERIAL.

Fire Fighting Procedures: WEAR SELF-CONTAINED BREATHING APPARATUS. WEAR FULL PROTECTIVE

EQUIPMENT.

DECOMPOSITION AT FLAME TEMPERATURES MAY FORM TOXIC FLUORINE

COMPOUNDS. AVOID BREATHING DECOMPOSITION PRODUCTS.

VI. ACCIDENTAL RELEASE MEASURES

**Containment/Cleanup:** SAFEGUARDS (PERSONNEL): REVIEW FIRE FIGHTING MEASURES AND

HANDLING (PERSONNEL) SECTIONS BEFORE PROCEEDING WITH CLEAN–UP. USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT DURING CLEAN–UP. PLACE IN CONTAINER FOR DISPOSAL. REMOVE SOURCE OF HEAT AND FLAME.

**VII. HANDLING AND STORAGE** 

Other:

HANDLING:

AVOID CONTACT WITH EYES. AVOID CONTACT WITH SKIN. WASH

THOROUGHLY AFTER HANDLING. DO NOT STORE OR CONSUME FOOD, DRINK OR TOBACCO IN AREAS WHERE THEY MAY BECOME CONTAMINATED WITH THIS MATERIAL.

STORAGE

KEEP CONTAINER TIGHTLY CLOSED. DO NOT STORE OR CONSUME FOOD, DRINK OR TOBACCO IN AREAS WHERE THEY MAY BECOME CONTAMINATED WITH THIS MATERIAL. KEEP AWAY FROM HEAT AND FLAMES TO AVOID

DECOMPOSITION PRODUCTS.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: WEAR SAFETY GLASSES OR COVERALL CHEMICAL SPLASH GOGGLES.

**Skin:** PROTECTIVE CLOTHING: WHERE THERE IS POTENTIAL FOR SKIN CONTACT

HAVE AVAILABLE AND WEAR AS APPROPRIATE, IMPERVIOUS GLOVES,

APRON, PANTS, AND JACKET.

**Respiratory:** WHERE THE POTENTIAL EXISTS FOR EXPOSURE TO DECOMPOSITION

PRODUCTS DUE TO HEATING OR ELEVATED TEMPERATURES, WEAR NIOSH/MSHA APPROVED RESPIRATORY PROTECTION AS APPROPRIATE.

**Engineering:** KEEP CONTAINER TIGHTLY CLOSED. KEEP AWAY FROM HEAT AND FLAMES.

IX. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** WHITE SOLID, WAXY GREASE

pH: NEUTRAL
Solubility in Water: NEGLIGIBLE

**Specific Gravity:** 1.89–1.93 @24°C (75°F)

Other: MELTING POINT: 320°C (608°F)

X. STABILITY AND REACTIVITY

**Stability:** STABLE

Hazardous Polymerization: WILL NOT OCCUR.

*Hazardous Decomposition* HEATING ABOVE 260–290°C (500–554°F) MAY FORM POTENTIALLY TOXIC

Products: FLUORINE COMPOUNDS. DEPOLYMERIZATION MAY OCCUR IN THE PRESENCE

OF SOME METAL OXIDES AT TEMPERATURES ABOVE 288°C (550°F). DECOMPOSITION OCCURS AT INCREASING RATES AS TEMPERATURE IS

RAISED ABOVE 355°C (670°F).

Incompatible Products: NONE REASONABLY FORESEEABLE.

XI. TOXICOLOGICAL INFORMATION

**Other:** ANIMAL DATA:

PERFLUOROALKYLETHER:

INHALATION 4 HOURS ALC: 19.54 MG/L IN RATS. SKIN ABOSRTION ALD: >17,000 MG/KG IN RATS.

ORAL ALD: >25,000 MG/KG IN RATS.<B>THE PRODUCT CONTAINS A MILD EYE IRRITANT. A SINGLE INHALATION EXPOSURE TO PERFLUOROALKYLETHER CAUSED NONSPECIFIC EFFECTS SUCH AS RESPIRATORY IRRITATION. TOXIC EFFECTS DESCRIBED IN ANIMALS EXPOSED TO DECOMPOSITION PRODUCTS OF PERFLUOROAKYLETHER FORMED ABOVE 260°C (500°F) INCLUDE LUNG IRRITATION, IRREGULAR RESPIRATION, TREMORS AND INCREASED LIVER WEIGHT. PULMONARY EDEMA AND DEATH OCCURRED IN RATS EXPOSED TO THE DECOMPOSITION PRODUCTS OF PERFLUOROALKYLETHER FORMED AT AROUND 290°C (554°F).<B> A SINGLE INHALATION EXPOSURE TO PTFE CAUSED IRRITATION OF THE LUNGS. A REPEATED INGESTION EXPOSURE CAUSED NO SIGNIFICANT TOXICOLOGICAL EFFECTS. LONG—TERM INGESTION EXPOSURE

CAUSED ALTERED WHITE BLOOD CELL COUNT.

XII. ECOLOGICAL INFORMATION

Ecotoxicity:

XIII. DISPOSAL CONSIDERATIONS

**Disposal Method:** TREATMENT, STORAGE, TRANSPORTATION, AND DISPOSAL MUST BE IN

ACCORDANCE WITH APPLICABLE FEDERAL, STATE/PROVINCIAL, AND LOCAL REGULATIONS. DO NOT FLUSH TO SURFACE WATER OR SANITARY SEWER

SYSTEM.

**XIV. TRANSPORT INFORMATION** 

**D.O.T. Shipping Name:** NOT REGULATED.

XV. REGULATORY INFORMATION

**TSCA Status:** REPORTED/INCLUDED.

EPA Sara Title III Chemical TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312:

Listings: ACUTE: YES CHRONIC: NO

FIRE: NO REACTIVITY: NO PRESSURE: NO

Supplemental State
Compliance Information:

### XVI. OTHER INFORMATION

## **WARRANTY INFORMATION**

THIS INFORMATION IS OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS A PRODUCT SPECIFICATION. NO WARRANTY, EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE WHETHER

THEY ARE APPROPRIATE.