

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Directives

1. PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED):	CRLube
CHEMICAL NAME/CLASS/SYNONYMS:	Semiconductor Grade Lubricant for Gasket & O-ring Installation
PRODUCT NUMBER:	CRLUBE
U.N. NUMBER:	N/A
U.N. DANGEROUS GOODS CLASS/SUBSIDIARY RISK:	N/A
MANUFACTURER'S NAME:	NuGeneration Technologies, LLC
ADDRESS:	1155 Park Avenue, Emeryville, CA 94608 USA
EMERGENCY PHONE:	1-510-962-9551 (NuGenTec Safe-T-Chem: For emergencies)
BUSINESS PHONE:	(888) 996-8436 (Product Information)
DATE OF PREPARATION:	January 12, 2011
DATE OF LAST REVISION:	August 15, 2012

2. COMPOSITION and INFORMATION ON INGREDIENTS

Hazardous Ingredients:	CAS #	EC #	ICSC #	WT %	Hazard Symbol; Risk Phrases
Flourinated Compound – Proprietary	Proprietary	N/A	N/A	~100%	HAZARD CLASSIFICATION: RISK PHRASES: None

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2004 format. 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, EU Directives and the Japanese Industrial Standard *JIS Z 7250: 2000*.

See Section 3 for full text of Risk Phrases and Safety Phrases

3. HAZARD IDENTIFICATION



EU LABELING AND CLASSIFICATION: This product meets the definition of the following hazard class as defined by the European Economic Community Guidelines.

EU CLASSIFICATION: None

EU RISK PHRASES: None

EU SAFETY PHRASES: None

EMERGENCY OVERVIEW: Warning!
Not expected to be a skin or eye irritant.

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM			
HEALTH HAZARD	(BLUE)	1	
FLAMMABILITY HAZARD	(RED)	0	
PHYSICAL HAZARD	(YELLOW)	0	
PROTECTIVE EQUIPMENT			
EYES	RESPIRATORY	HANDS	BODY
	SEE SECTION 8		SEE SECTION 8
For Routine Industrial Use and Handling Applications			

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate
3 = Serious 4 = Severe * = Chronic hazard

SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact.

INHALATION: No know inhalation issues in normal industrial use.

CONTACT WITH SKIN or EYES: Prolonged or repeated contact may cause skin irritation, may irritate eyes.

INGESTION: No know issues with ingestion, large quantities may be harmful.

HEALTH EFFECTS OR RISKS FROM EXPOSURE:

ACUTE: Not expected to be a skin or eye irritant.

CHRONIC: Prolonged/repeated contact may produce mild skin irritation.

TARGET ORGANS: Acute: eyes. Chronic: n/a.

4. FIRST-AID MEASURES

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and MSDS to health professional with contaminated individual.

SKIN EXPOSURE: Wash affected areas thoroughly with water.

EYE EXPOSURE: In case of contact with the eyes, rinse plenty of water.

INHALATION: Not an inhalation hazard.

INGESTION: Induce vomiting then give water or milk.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Skin contact may defat skin.

5. FIRE-FIGHTING MEASURES

FLASH POINT: Not applicable

AUTOIGNITION TEMPERATURE: No Data

FLAMMABLE LIMITS (in air by volume, %): No Data

FIRE EXTINGUISHING MATERIALS: Use fire extinguishing materials appropriate for surrounding fire.

Water Spray: Yes

Foam: Yes

Halon: Yes

Carbon Dioxide: Yes

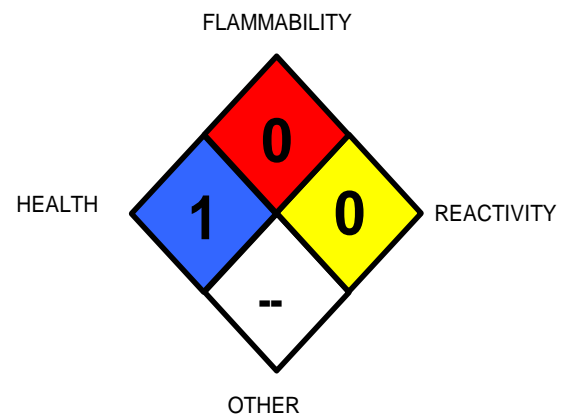
Dry Chemical: Yes

Other: Any "C" Class

UNUSUAL FIRE AND EXPLOSION HAZARDS: Product will not burn. Under fire conditions, carbon monoxide may be emitted.

SPECIAL FIRE-FIGHTING PROCEDURES: Firefighters should wear NIOSH/MSHA approved positive pressure breathing apparatus with full face-piece and full acid-resistant protective clothing.

NFPA RATING



6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Wash to waste treatment system with water or absorb spill with inert material (dry sand). Proper protective equipment should be used.

7. HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product.

STORAGE AND HANDLING PRACTICES: Avoid contact with eyes, skin, and clothing. Empty drums should be returned to a drum reconditioner, or disposed of properly.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS: Ensure eyewash/safety shower stations are available near areas where this product is used.

EXPOSURE LIMITS/GUIDELINES:

CHEMICAL NAME	CAS #	EXPOSURE LIMITS IN AIR									
		ACGIH-TLVs		OSHA-PELs		NIOSH-RELs		NIOSH	AIHA WEELS		OTHER
		TWA ppm	STEL ppm	TWA ppm	STEL ppm	TWA ppm	STEL ppm	IDLH ppm	TWA ppm	STEL ppm	ppm
CRLUBE	N/A	NE	NE	NE	NE	NE	NE	NE	NE	NE	

NE = Not Established.

NIC = Notice of Intended Change

See Section 16 for Definitions of Terms Used.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under U.S. Federal OSHA's Respiratory Protection Standard (1910.134-1998) or the regulations of various U.S. States, Canada, EU Member States, or those of Japan. Air-purifying respirators with dust/mist/fume filters are recommended if operations may produce mists or sprays from this product.

EYE PROTECTION: Safety goggles. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards. Maintain eye wash fountain in the work area.

HAND PROTECTION: Not required when handling this product. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Use body protection appropriate for task (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

9. PHYSICAL and CHEMICAL PROPERTIES

BULK DENSITY: 12.0-13.5 lbs/gallon
SPECIFIC GRAVITY @ 20°C: ~1.52 (water=1)
SOLUBILITY IN WATER: negligible
VAPOR PRESSURE, mmHg @ 20°C (68°F): 200-250
ODOR: Mild
APPEARANCE and COLOR: Liquid / Clear, colorless

EVAPORATION RATE (n-BuAc=1): No Data
MELTING/FREEZING POINT: -80°C (-112F)
BOILING POINT: ~55° C (131F)
pH: Neutral
Viscosity: <1 cPs
VOC: ZERO

10. STABILITY and REACTIVITY

STABILITY: Stable under normal conditions.

DECOMPOSITION PRODUCTS: carbon monoxide when heated to decomposition.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Safe under normal usage conditions.

HAZARDOUS POLYMERIZATION: Not know to occur.

CONDITIONS TO AVOID: Spills can be slippery.

11. TOXICOLOGICAL INFORMATION

Routes of Entry: Eye contact.

Toxicity to Animals: Non-toxic.

Chronic Effects on Humans: The substance is non-toxic.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

No information available.

Chemical Fate Information:

Degradable.

13. DISPOSAL CONSIDERATIONS

Waste disposal of substance:

Must be dumped or incinerated in accordance with local regulations for biodegradable products. Do not discharge into waterways or sewer systems without proper authorization.

Container disposal:

Empty containers with less than 1 inch of residue may be land filled at a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. If containers are not empty, they must be disposed of in a RCRA-licensed facility.

RCRA: N/A

14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

PROPER SHIPPING NAME: CRLube
HAZARD CLASS NUMBER: N/A
UN IDENTIFICATION NUMBER: N/A **PACKING GROUP:** III
DOT LABEL(S) REQUIRED: Non-regulated material

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER, 2004: N/A

MARINE POLLUTANT: This product **is NOT** designated as a marine pollutant by the Department of Transportation (49 CFR 172.101, Appendix B).

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is NOT considered as dangerous goods.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is NOT considered as dangerous goods.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is NOT considered by the United Nations Economic Commission for Europe to be dangerous goods.

15. REGULATORY INFORMATION

ADDITIONAL UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act, and are listed as follows:

CHEMICAL NAME	SARA 302 (40 CFR 355, Appendix A)	SARA 304 (40 CFR Table 302.4)	SARA 313 (40 CFR 372.65)
CRLUBE	NO	NO	NO

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): N/A

U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory.

OTHER U.S. FEDERAL REGULATIONS: Not applicable.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product is NOT on the Proposition 65 Lists.

CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: The components of this product are on the DSL or NDSL Inventories

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: N/A

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

EU CLASSIFICATION: None

EU RISK PHRASES: N/A

EU SAFETY PHRASES: N/A

EUROPEAN ECONOMIC COMMUNITY INFORMATION FOR CONSTITUENTS: The following information is available for the components of this product. **CRLUBE:** EU EINECS/ELINCS NUMBER: N/A

AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: The components of this product are listed on the AICS.
HAZARDOUS SUBSTANCES INFORMATION SYSTEM: CRLUBE is NOT listed by the Hazardous Substances Information System as a Hazardous Substance.
STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable.
LABELING AND CLASSIFICATION: The product is NOT-regulated, based a review of the regulation [NOHSC: 10005 (1994-Current)]:
Australian Hazchem Code: N/A

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.
JAPANESE ENCS INVENTORY: The components of this product are on the ENCS Inventory as indicated in the section on International Chemical Inventories, below.
POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW: No component of this product is a listed Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

The components listed in CRLUBE are listed on the following inventories:

Asia-Pac: Listed
Australian Inventory of Chemical Substances (AICS): Listed
Korean Existing Chemicals List (ECL): Listed
Japanese Existing National Inventory of Chemical Substances (ENCS): Listed
Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed
Swiss Giftlist of Toxic Substances: Listed
U.S. TSCA: Listed

16. OTHER INFORMATION

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[MSDS Authoring Services](#)

DATE: August 15, 2012

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End of MSDS