

MATERIAL SAFETY DATA SHEET

Finished Product



Date-Issued: 08/06/2007
MSDS Ref. No: RX2200-10
Date-Revised:
Revision No: New MSDS

RX2200-10 Silicone Lubricant, CARB Compliant

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Silicone Lubricant
PRODUCT DESCRIPTION: General Purpose Silicone Lubricant, CARB Compliant
PRODUCT CODE: RX2200-10

MARKETER

NTE Electronics, Inc.
44 Farrand Street
Bloomfield, NJ 07003

Emergency Contact: Chemtrec
Service Number: 1-973-748-5089

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (US Transportation) : (800) 424-9300
CANUTEC (Canadian Transportation) : (613) 996-6666
Emergency Phone : (800) 858-4043

2. HAZARDS IDENTIFICATION

HAZARD DESIGNATION

"F" – Highly inflammable
R11 – Highly inflammable.
"Xn" – Harmful
R22 – Harmful if swallowed.

R36/37/38 – Irritating to eyes, respiratory system and skin.

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: Flammable Aerosol

POTENTIAL HEALTH EFFECTS

EYES: Substance causes substantial eye irritation.

SKIN: Liquid contact could cause frostbite.

SKIN ABSORPTION: Skin absorption can occur.

INGESTION: Substance may be harmful if swallowed.

INHALATION: Harmful if inhaled. Prolonged or repeated inhalation may cause lung damage and/or central nervous system disturbances.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Symptoms of overexposure include: stinging, tearing, redness, and pain

SKIN: Exposure to rapidly expanding gas or vaporizing liquid may cause frostbite ("cold" burn)

INGESTION: Swallowing of this material may result in nausea, vomiting and weakness followed by central nervous system depression.

INHALATION: High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis and loss of consciousness).

CHRONIC EFFECTS: Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

CARCINOGENICITY: NOT listed

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: Not Established

TERATOGENIC EFFECTS: Not considered a developmental toxicant.

ROUTES OF ENTRY: Inhalation is a major route of entry.

CANCER STATEMENT: NOT listed

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS	EINECS
Siloxanes and Silicones, di-Me	1 – 4	63148-62-9	xxx-xxx-x
1,1,1,2-Tetrafluoroethane (HFC-134a)	20 – 40	811-97-2	212-337-0
n-Heptane	50 – 70	142-82-5	

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

INGESTION: If swallowed, do not induce vomiting. If conscious and alert, give two glasses of water. Seek medical attention.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT: (16°F) TAG CC

GENERAL HAZARD : Aerosol cans may erupt with force at temperatures above 120F.

EXTINGUISHING MEDIA: Water, foam, dry chemical, carbon dioxide.

HAZARDOUS COMBUSTION PRODUCTS: Smoke, fumes and oxides of carbon.

FIRE FIGHTING PROCEDURES: Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

HAZARDOUS DECOMPOSITION PRODUCT: Forced combustion yields carbon and silicone oxides.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb liquid and place in a sealed container for disposal. Vapors can travel to an ignition source.

GENERAL PROCEDURES: Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on adsorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. After all visible traces, including vapors, have been removed thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth, gravel, etc. as necessary and place in closed containers for disposal.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Wash thoroughly after handling. Use only in a well ventilated area. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Store in a cool dry place.

HANDLING: Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Do not allow product to contact open flame or electrical heating elements because dangerous decomposition products may form.

STORAGE: Store in a cool place in original container and protect from sunlight. Keep away from heat and flame.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
EXPOSURE LIMITS							
		OSHA PEL		ACGIH TLV		SupplierOEL	
Chemical Name		Ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
1,1,1,2-Tetrafluoroethane (HFC-134a)	TWA	NE		NE		1,000 ppm <1>	<1>
n-Heptane	TWA	400 ppm		400 ppm			
OSHA TABLE CONTENTS:							
1. * (AEL)=Acceptable Exposure Limit as established by the manufacture.							

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

SKIN: Skin contact with liquid may cause frostbite. General work clothing and gloves (leather) should provide adequate protection. If prolonged contact with the liquid or gas is anticipated, insulate gloves constructed of PVA, neoprene or butyl rubber should be used. Any contaminated clothing should be promptly removed and washed before reuse.

RESPIRATORY: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

WORK HYGIENIC PRACTICES: Wash hands before eating and wash before reuse.

OTHER USE PRECAUTIONS: Emergency shower and eyewash facility should be in close proximity.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Boiling Point	Freezing Point	Solubility in Water	Specific Gravity
	(°C)	(°C)		
1,1,1,2-Tetrafluoroethane (HFC-134a)	-26.4	-101	Negligible	1.21

PHYSICAL STATE: Liquid

ODOR: Faint ethereal order.

APPEARANCE: Clear, mobile liquid.

COLOR: Colorless

pH: Not Applicable

VAPOR PRESSURE: 73.59 mmHg@20C (VOC Composite Vapor Pressure)

VAPOR DENSITY: > 1 (AIR=1)

BOILING POINT: Not Available

FREEZING POINT: Not Available

MELTING POINT: Not Applicable

FLASHPOINT AND METHOD: (16°F) TAG CC

SOLUBILITY IN WATER: Negligible

DENISTY: 0.6926 at 25°C

VISCOSITY: Not Applicable

(VOC): 60.000 % by weight

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable under normal conditions.

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Heat, flames, ignition sources, and incompatibles.

HAZARDOUS DECOMPOSITION PRODUCTS: Forced combustion yields carbon and silicone oxides.

INCOMPATIBLE MATERIALS: Strong acids and alkalis, reactive metals and strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

ACUTE	
Chemical Name	INHALATION LC ₅₀ (rat)
1,1,1,2-Tetrafluoroethane (HFC-134a)	> 500000 ppm

EYES:

NOTES: Moderately to severely irritating

DERMAL LC₅₀:

NOTES: Slight to very low toxicity

INHALATION LC₅₀:

NOTES: HFC134A: Cardiac Sensitization Threshold (dog) >80,000 ppm.

NOTES: Fumes/liquid -- Irritant

EYE EFFECTS: Mixture is a moderate eye irritant

SKIN EFFECTS: Causes irritation to skin.

CARCINOGENICITY

Chemical Name	NTP STATUS	IARC STATUS	OSHA STATUS
1,1,1,2-Tetrafluoroethane	NOT	NOT LISTED	NOT LISTED
	LISTED		

IARC: NOT Listed

NTP: NOT Listed

Notes: Not listed as a carcinogen

NEUROTOXICITY: Exposure to high concentrations may effect the nervous system.

MUTAGENICITY: Collective data indicate non-mutagenic.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: There is limited information available on the environmental fate and effects of this material. The primary environmental concern for release is the impact on the aquatic and terrestrial species. Due care should be taken to avoid the accidental release of this material into the environment.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Federal, State and Local laws governing disposal of materials can differ. Ensure compliance with proper authorities before disposal.

GENERAL COMMENTS: Dispose of in a manner consistent with federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

DOT (DEPARTMENT OF TRANSPORTATIONS)

PROPER SHIPPING NAME: CONSUMER COMMODITY ORM-D

IN/NA NUMBER: NA

PACKING GROUP: NA

ROAD AND RAIL (ADR/RID)

KEMLER NUMBER: UN1950

HAZARD CLASS: 2.1

AIR (ICAO/IATA)

SHIPPING NAME: CONSUMER COMMODITY ID8000

UN/NA NUMBER: ID8000

PRIMARY HAZARD CLASS/DIVISION: 9

PACKING GROUP: NA

NOTE: Domestic shipments only. When shipping International contact TechSpray shipping department.

VESSEL (IMO/IMDG)

SHIPPING NAME: AEROSOLS IN LIMITED QUANTITIES OF CLASS 2

UN/NA NUMBER: UN1950

PRIMARY HAZARD CLASS/DIVISION: 2.1

PACKING GROUP: NA

NOTE: Page 2102

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: IMMEDIATE / PRESSURE

FIRE: Yes **PRESSURE GENERATING:** Yes **ACUTE:** Yes

313 REPORTABLE INGREDIENTS: Not considered a SARA 313 "Toxic Chemical".

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: NOT listed

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: None of the ingredients are CERCLA/Superfund hazardous chemicals.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS	TSCA SECTION
Siloxanes and Silicones, di-Me	63148-62-9	8a, 8d
1,1,1,2-Tetrafluoroethane (HFC-134a)	811-97-2	

TSCA STATUS: All components of this product are either listed on exempt from listing in the TSCA inventory.

CLEAN AIR:

Chemical Name	Wt. %	CAS
1,1,1,2-Tetrafluoroethane (HFC-134a)	20 - 40	811-97-2

**40 CFR PART 68 --- RISK MANAGEMENT FOR CHEMICAL ACCIDENT RELEASE
PREVENTION: NOT listed**

**OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)
29 CFR 1910.119---PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS
CHEMICALS:** None of the chemicals in the product are considered highly hazardous by OSHA.

CALIFORNIA PROPOSITION 65: This product does not contain any chemicals known to the State of California to cause cancer.

PSHA HAZARD COMM. RULE: Contents of the MSDS comply with OSHA Hazard Communication Standard 29 CFR 1910.1200.

CLEAN WATER ACT: NOT listed

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

WHMIS CLASS: Class A, Class D28

**EUROPEAN COMMUNITY
EEC LABEL SYMBOL AND CLASSIFICATION**



“F” – Highly flammable
R11 – Highly flammable



“Xn” – Harmful
R22 - Harmful if swallowed

R36/37/38 – Irritating to eyes, respiratory system and skin.

16. OTHER INFORMATION

REVISION SUMMARY: New MSDS

DATA SOURCES: Code of Federal Regulations (CFR) The Sigma-Aldrich Library of Regulatory and Safety data OSHA Hazard Communication Standard (29CFR1910.1200) Various Federal, State and Local Regulations.

MANUFACTURER DISCLAIMER: To the best of our knowledge, the information contained herein is accurate. However, neither NTE Electronics Inc, its supplier, or any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.