

# MATERIAL SAFETY DATA SHEET

COMPLIES WITH OSHA'S HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

## SECTION I - PRODUCT IDENTIFICATION

**Product Name:** NL 89  
**Product Number:** 240  
**Product Type:** AEROSOL  
**Supplier's Name:** Northland Manufacturing  
**Supplier's Address:** 3485 South Monroe St. • Tallahassee, FL 32301  
**D.O.T. Hazard Class:** CONSUMER COMMODITY - ORM-D

**Formula:** Proprietary  
**Date Prepared:** 03/24/04  
**Phone:** (850) 878-5149

**HMIS Rating** (Based on Aerosol Conc.):  
0-Minimal 1- Slight 2- Moderate  
3- Serious 4- Extreme  
**HEALTH:** 1 **FIRE:** 0 **REACTIVITY:** 1  
**Personal Protection :** B

## SECTION II - INGREDIENTS

CHEMICAL NAME	CAS #	%WT	313/Chem	Skin	Carcinogen	PEL	TW/TLV
1,1,1,2 Tetrafluoroethane	811-97-2	100	NO	NO	NO	N/E	N/E

## SECTION III - PHYSICAL DATA

**Data Below Based On Aerosol Concentrate Only:**

Boiling Point: ~ -15.7° F

pH: N/A

Solubility In Water: 0.15 WT% @ 25° C

Appearance/Odor: Clear Colorless Liquid, Faint Ether-like Odor

Vapor Density (Air=1): 3.6 @ 77° F

Liquid Density (H<sub>2</sub>O=1) @ 77° F: 1.203

**Data Below Based On Total Contents:**

Vapor Pressure of can (psig @ 70°F): 90

Total VOC (Volatile Organic Compound) %: 0%

## SECTION IV - FIRE AND EXPLOSION DATA

**Flash Point** (of Concentrate Only): Will Not Burn

**Flammability** (as per USA Flame Projection Test): Non-Flammable Spray

**Extinguishing Media:** Foam, CO<sub>2</sub>, Dry Media

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus and protective clothing. Cool fire exposed containers to prevent rupturing.

**Unusual Fire and Explosion Hazards:** Exposure to temperature above 120° F may cause bursting.

## SECTION V - REACTIVITY DATA

**Stability:** Material stable, however, avoid open flames & exposure to high temperatures.

**Hazardous Polymerization:** Will not Occur.

**Incompatibility:** Incompatible with alkali or alkaline earth metals- powered Al, Zn, Be, etc.

**Hazardous Decomposition Products:** Decomposition products are hazardous. This material can be decomposed by high temperatures (open flames, glowing metal surfaces, etc.) forming hydrofluoric acid and possibly carbonyl fluoride.

## SECTION VI - STORAGE AND HANDLING

**KEEP OUT OF REACH OF CHILDREN.**

For Industrial and Institutional use only.

Store in a cool, dry area away from heat or open flame.

Do not store at temperatures above 120° F.

**NFPA Code 30B Rating:** Level 1 Aerosol.

## SECTION VII - HEALTH AND FIRST AID

**PRIMARY ROUTES OF ENTRY & EFFECTS OF OVER EXPOSURE:**

**Eyes:** "Frostbite like effects may occur if the liquid or escaping vapors contact the eyes."

**Skin:** Immediate effects of overexposure may include: Frostbite if liquid or vapor contact is made with the skin.

**Inhalation:** Inhalation of high concentrations of vapor is harmful & may cause heart irregularities, unconsciousness, or death. Intentional misuse or deliberate inhalation may cause death without warning. Vapors are heavier than air and may accumulate in low lying or confined areas.

**Ingestion:** Ingestion is not considered a potential route of exposure.

**FIRST AID PROCEDURES:**

**Eyes:** In case of contact, immediately flush with large amounts of cool running water for at least 15 minutes while holding upper and lower lids open. Call a physician.

**Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician. Treat for frostbite if necessary by gently warming affected area. Wash contaminated clothing before reuse.

**Inhalation:** If high concentrations are inhaled, immediately remove to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**Ingestion:** Ingestion is not considered a potential route of exposure.

**Note to Physician:** Because of possible disturbances of cardiac rhythm, catecholamine drugs, such as epinephrine, should be used with special caution in situations of emergency life support.

## SECTION VIII - SPECIAL PROTECTION DATA

**Respiratory Protection:** None needed for proper use in accordance with label directions.

**Ventilation:** Provide local exhaust to keep TLV of Section II ingredients below acceptable limits.

**Protective Gloves:** None needed for proper use in accordance with label directions. Use impervious gloves if hand contact will be made.

**Eye Protection:** None needed unless it is anticipated that a splash or spray back will occur, then wear safety glasses or chemical proof goggles.

## SECTION IX - SPILL OR LEAK PROTECTION

**STEPS TO BE TAKEN IN CASE OF SPILL OR LEAK:** Allow propellant to evaporate. Maintain local exhaust and adequate ventilation. No smoking. Keep sparks, heat sources and open flame far away from spill or leak. Cover with absorbent material and sweep up. Wash area to prevent slipping. Dispose of soaked absorbent material in accordance with Federal, State and local laws.

**WASTE DISPOSAL METHOD:** Aerosol cans, when emptied and depressurized through normal use, pose no disposal hazard and should be recycled. Consult Federal, State and local authorities for approved procedures.

N/A= NOT APPLICABLE · N/E=NOT ESTABLISHED · N/D=NOT DETERMINED · <=LESS THAN · >=MORE THAN

**NOTICE:** The information contained on this Material Safety Data Sheet is considered accurate as of the date of publication. It is not necessarily all inclusive nor fully adequate in every circumstance. The suggestions should not be confused with, nor followed in violation of applicable laws, regulations, rules or insurance requirements. No warranty, express or implied, of merchantability, fitness, accuracy of data, or the results to be obtained from the use thereof is made. The vendor assumes no responsibility for injury or damages resulting from the inappropriate use of this product.