***** * NYCO * ***** PRODUCTS COMPANY

5332 Dansher Road Countryside, Illinois 60525

SAFETY DATA SHEE MATERIAL

Date: November 3, 1992

MSDS No.: N-008

Emergency Phones: 708-579-8100 (NYCO), 800-424-9300 (CHEMTREC)

PLEASE NOTE: This MSDS is being provided to your company for the purpose of providing current health and safety information to your management and for your employees who work with this material. Please read the information on these sheets, and then provide this information to those people at your company whose responsibility it is to comply with FEDERAL and STATE RIGHT-TO-KNOW regulations. Also make this information available to any employee who requests it. It is your obligation to comply with these regulations.

SECTION I - PRODUCT IDENTITY

PRODUCT NAME: N-008 NYCO DE-LIME

Formula: Mixture, Hydrochloric Acid and additives in water

Chemical Type: Inorganic Acid

HMIS RATINGS: Health-3, Flammability-0, Reactivity-0, Protection-D

SEE SECTION IX AT THE END OF THE SAFETY DATA SHEET

SECTION II - HAZARDOUS INGREDIENTS

PERCENT

TLV

CARCINOGEN

Hydrochloric Acid (Muriatic Acid) (CAS No. 7647-01-0) > 25%

5 ppm.(ceiling)

(vapor)

SECTION III - CHEMICAL AND PHYSICAL PROPERTIES

Appearance: Dark Brown Liquid

Odor: acid odor

pH: < 1 strongly acidic Water Solubility: Complete

Viscosity, Cp @ 25oC.: A-4 Gardner

Boiling Pt.: est. 185oF Melting Point: -50oF

Spec. Gravity(H20=1): 1.14

Vapor Pressure(mm Hg): n/a

SECTION IV - FIRE AND EXPLOSION HAZARDS

Flash Point(Method): none

Explosion Limits: Upper n/a

Lower n/a

n/a (product is non-flammable) Extinguishing Media:

Special Fire fighting Procedures and Hazards: Avoid skin and eye contact, and breathing of acid vapors. Wear head and body protection and HCl respirator if exposure to liquid is likely.

SECTION V - REACTIVITY INFORMATION

Stable: X Unstable:

Precautions:

Incompatibility: strong alkalies, materials not resistant to strong

acids, active metals (zinc, aluminum, magnesium, etc).

Hazardous Decomposition Products: Hydrogen chloride vapors. Contact with active metals can release flammable hydrogen gas.

Hazardous Polymerization: Occurs Does Not Occur X

SECTION VI - HEALTH HAZARDS - PROTECTIVE MEASURES - FIRST AID

Inhalation: Breathing of vapor can cause respiratory irritation and inflammation. Breathing of mist or liquid can cause burns. Wear approved HCl vapor/mist respirator if exposure is likely.

Remove to fresh air. Give artificial respiration or oxygen if needed. Get prompt medical attention.

Skin: Corrosive. Causes irritation and burns. Wear acidresistant protective gloves, boots, and clothing.
Provide convenient safety showers. Remove contaminated clothing. Flush skin thoroughly with water for 15

minutes. Get medical attention if burns persist.

Eyes: Corrosive. Causes eye damage. Wear splash proof goggles.

Provide convenient eyewash stations. Flush immediately
with water for 15 minutes. Get prompt medical attention.

Ingestion: Corrosive. Causes irritation and burning in mouth and throat.

Wear face shield (or respirator). Avoid swallowing.

Drink lots of water or, preferably, milk. Get medical attention if effects persist. Do not induce vomiting.

IN ALL CASES: Get prompt medical attention if effects persist.

Most likely routes of entry: Skin, Eyes, Inhalation, Ingestion

Other Important Medical or Precautionary Information:
Overexposure to product has the following effects: Inhalation of vapors may cause pulmonary edema, collapse of circulatory system and damage to the upper respiratory system and collapse. Inhalation may cause coughing, throat burning, choking, bronchitis and difficult breathing. Ingestion is harmful and may be fatal. Ingestion may cause severe burns of mouth, esophagus, throat and stomach. It could cause nausea and vomiting.

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SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Storage and Handling: Check daily for any leaks from containers, vessels, pumps, and piping. Have water hoses and alkali (caustic soda, lime, etc.) convenient. Only use containers and equipment designed for acid service.

<u>Waste Disposal:</u> If neutralized, may be disposable in sewers if local regulations permit. Otherwise, send to licensed treatment and disposal facility. As supplied, this product is a RCRA hazardous waste.

Empty Containers: Rinse well before handling and disposal.

Other Precautions: Areas of use and storage should be ventilated adequately to reduce vapors below odor level.

SECTION VIII - REGULATORY INFORMATION

Reportable for SARA Title III, S.313 (Form R): Hydrochloric Acid

0-None

SECTION IX-HAZARDOUS MATERIALS IDENTIFICATION SYSTEM

HEALTH RATING
HMIS HAZARD INDEX
4-Severe
3-Serious
2-Moderate
1-Slight
0-Minimal

FLAMMABILITY RATING
NFPA HAZARD RATING
4-Extreme
3-High
2-Moderate
1-Slight
0-Insignificant

REACTIVITY RATING 4-Severe

3-Serious 2-Moderate

1-Slight O-Minimal PERSONAL PROTECTIVE EQUIPMENT
A-Safety Glasses
B-Safety Glasses, Gloves
C-Safety Glasses, Gloves, Synthetic
Apron
D-Face Shield, Gloves, Synthetic Apron
E-Safety Glasses, Gloves, Dust
Respirator

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