Ned's Drnko Service, Inc.
910 Montgomery St.
Syracuse, N.Y. 13202

# Material Safety Data Sheet

## I. General Information

| | |
|---|---|
| Chemical Name & Synonyms: muriatic acid/ hydrochloric acid | Trade Name & Synonyms: Ned's #85 Coil Conditioner |
| Chemical Family: inorganic acid | Formula: HCl |
| Proper DOT Shipping Name: Hydrochloric acid solution | DOT Hazard Classification: UN 1789 corrosive |
| Manufacturer (distributor): Van Waters Chemical Corp. | Manufacturer's Phone Number: (315) 422-8940 |
| Manufacturer's Address: 501 W. Fayette St. Syracuse, N.Y. 13204 | Chemtrec Phone Number: (800) 424-9300 |

## II. Ingredients

| Principal Hazardous Components | Percent | Threshold Limit Value (units) |
|---|---|---|
| hydrochloric acid | 30-32 % | 5 ppm |
| cationic inhibitor | less than 1 | N/A |

## III. Physical Data

| | |
|---|---|
| Boiling Point (°F): 230 | Specific Gravity ($H_2O$ = 1): 1.16 |
| Vapor Pressure (mm Hg.): 20 | Percent Volatile By Volume (%): 99+ |
| Vapor Density (Air = 1): 1.2 | Evaporation Rate ($\frac{BuAc}{1}$): 2 |
| Solubility in Water: miscible | pH: (neat) less than 1 |
| Appearance & Odor: | |

## IV. Fire & Explosion Hazard Data

| | |
|---|---|
| Flash Point (Test Method): N/A | Auto Ignition Temperature |
| Flammable Limits: N/A | LEL / UEL |

Extinguishing Media: water fog, $CO_2$, dry chemical

Special Fire Fighting Procedures: self-contained breathing apparatus with full face-piece operated in positive pressure mode. Full protective clothing

Unusual Fire & Explosion Hazards: acid may react with alkali metals to form potentially explosive hydrogen gas

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## V. Health Hazard Data

| Threshold Limit Value | OSHA Threshold Limit Value | ACGIH Threshold Limit Value |
|---|---|---|
| 5 ppm | 5 (ceiling) | unk |

| Carcinogen - NTP Program | Carcinogen - IARC Program |
|---|---|
| no | no |

**Symptoms of Exposure** eyes: severe damage, even blindness. Rapid action skin: causes burns, possibly deep ulcerrations. inhalation: damage to nasal and respiratory passages. ingestion: severe damage to

**Medical Conditions Aggravated By Exposure** mucous membranes and deep tissues; can rresult in death on penetrration to vital arreas.
medical condition aggravation: respiratory problems.

**Primary Route(s) of Entry** inhalation and ingestion.

**Emergency First Aid:** eyes: Flush immediately with water 15 minutes, rraising upper and lower eyelids. Get medical attn. immediately. skin: flush thoroughly with water 15 min. Get medical attn. Ingestion: do not induce ~~vomiting. Dilute by giving water, Give milk of magnesia or other buffering~~ agent. Keep warm and quiet. Get medical attn. Inhalation: remove to fresh air. If breathing is difficult administer oxygen.

## VI. Reactivity Data

| | | |
|---|---|---|
| Stability | | Unstable |
| | X | Stable |
| Incompatability | | |
| Hazardous Polymerization | | May Occur |
| | X | Will Not Occur |

**Conditions To Avoid**

**Materials To Avoid** alkalies and alkali metals

**Conditions To Avoid**

**Hazardous Decomposition Products** N/A

## VII. Environmental Protection Procedures

**Spill Response** small spill: flush to drain with large amt. of water. Large spill; collect and add slowly to soln. of soda ash and slaked lime. Addd neutralized solution to excess running water.

**Waste Disposal Method** in accordance with all applicable rregulations.

## VIII. Special Protection Information

**Eye Protection** Faceshield

**Skin Protection** rubber gloves

**Respiratory Protection (Specific Type)** do not exceed TLV

**Ventilation Recommended** sufficient to remain below TLV

**Other Protection** N/A in normal intended use.

## IX. Special Precautions

**Hygienic Practices In Handling & Storage** keep container closed when not in use. Vapors will escape from open container.

**Precautions For Repair & Maintenance Of Contaminated Equipment** rinse thorpughly before any procedure.

**Other Precautions** always add acid to water. Use outdoors or in well ventilated room for cleaning coils in hot high pressure machines.

prepared by D. Von Ploss 8/20/87