

**ETOWAH CHEMICAL**  
**SALES & SERVICE**  
P.O. BOX 4416  
GADSDEN, AL 35904-0416  
(800) 848-8541



**N. F. P. A.**  
4 = Extreme  
3 = High  
2 = Moderate  
1 = Slight  
0 = Insignificant

|                            |          |
|----------------------------|----------|
| <b>HEALTH</b>              | <b>3</b> |
| <b>FIRE</b>                | <b>0</b> |
| <b>REACTIVITY</b>          | <b>1</b> |
| <b>PERSONAL PROTECTION</b> | <b>C</b> |

## Material Safety Data Sheet

24 Hour Emergency Telephone Number: (800) 535-5053

### SECTION I - IDENTIFICATION

|                                     |   |                          |          |
|-------------------------------------|---|--------------------------|----------|
| <b>Product Name</b>                 | <b>X-88</b>                                       | <b>Date last Revised</b> | AUG 2009 |
| <b>Chemical Family</b>              | ACID CONCRETE CLEANER                             | <b>Item Number</b>       |          |
| <b>Proper D.O.T. Shipping Name</b>  | HYDROCHLORIC ACID SOLUTION                        |                          |          |
| <b>D.O.T. Hazard Classification</b> | 8, UN-1789, PG II, CORROSIVE <b>BIODEGRADABLE</b> |                          |          |

### SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

| % By Weight | Material                          | PEL  | T. L. V. | C. A. S. No. |
|-------------|-----------------------------------|------|----------|--------------|
| < 65.0      | HYDROCHLORIC ACID                 | 5ppm | 5ppm     | 7647-01-0    |
|             | Balance non-hazardous ingredients |      |          |              |

### SECTION III - PHYSICAL DATA

|                               |   |                          |              |
|-------------------------------|---|--------------------------|--------------|
| <b>Boiling Point</b>          | 223 DEG F                               | <b>pH (Conc.)</b>        | BELOW 0      |
| <b>Solubility In Water</b>    | COMPLETE                                | <b>pH (Use Dilution)</b> | 1% 0.5 - 1.0 |
| <b>% Volatility By Weight</b> | <90                                     | <b>Evaporation Rate</b>  | WATER=1 > 1  |
| <b>Specific Gravity</b>       | 1.09                                    | <b>Physical Form</b>     | LIQUID       |
| <b>Appearance And Odor</b>    | CLEAR, PURPLE , SHARP PUNGENT ACID ODOR |                          |              |

### SECTION IV - FIRE AND EXPLOSION DATA INGREDIENTS/IDENTITY INFORMATION

|   |   |
|---|---|
| <b>Flash Point</b>                        | NONE  |
| <b>Extinguishing Media</b>                | REGULAR FOAM, CARBON DIOXIDE, DRY CHEMICAL  |
| <b>Flammable Limits</b>                   | N/A   |
| <b>Special Fire Fighting Procedures</b>   | WEAR SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE PIECE OPERATE IN THE POSITIVE PRESSURE DEMAND MODE WHEN FIGHTING FIRES |
| <b>Unusual Fire and Explosion Hazards</b> | ACIDS REACT WITH MOST METALS TO RELEASE HYDROGEN GAS, WHICH MAY FORM AN EXPLOSIVE MIXTURE WITH AIR                            |

### SECTION V - REACTIVITY DATA

|   |   |
|---|---|
| <b>Stability</b>                        | STABLE  |
| <b>Conditions to Avoid</b>              | OXIDIZERS   |
| <b>Incompatibility</b>                  | AVOID STRONG ALKALIES, OXIDIZERS, CHLORINE BLEACH |
| <b>Hazardous Decomposition Products</b> | MAY FORM TOXIC ACID VAPORS                        |
| <b>Hazardous Polymerization</b>         | WILL NOT OCCUR                                    |

| <b>SECTION VI - HEALTH HAZARD</b>   |   |
|---|---|
| <b>Routes(s) of Entry</b>   | <b>Inhalation? YES   Skin? YES   Ingestion? NO</b>  |
| <b>Health Hazards (Acute and Chronic)</b>   | <b>EYES: WILL CAUSE BURNS AND DAMAGE VERY RAPIDLY. SKIN: WILL CAUSE BURNS. INHALATION: VAPORS ARE IRRITATING TO MUCOUS MEMBRANE. MIST MAY CAUSE PULMONARY EDEMA. INGESTION: RESULTS IN SEVERE DAMAGE TO MUCOUS MEMBRANES, CAN RESULT IN DEATH.</b>  |
| <b>Carcinogenicity</b>  | <b>NTP? NO   IARC Monographs? NO   OSHA Regulated? NO</b>   |
| <b>Emergency Aid and First Aid Procedures</b>   | <b>EYES: FLUSH WITH WATER FOR 20 MINUTES WHILE CALLING FOR IMMEDIATE MEDICAL ATTENTION. SKIN: FLUSH WITH RUNNING WATER AND IF PROLONGED SKIN CONTACT, SEEK MEDICAL ATTENTION. INHALATION: REMOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. INGESTION: DO NOT INDUCE VOMITING. DILUTE WITH WATER. GIVE MILK OF MAGNESIA. SEEK MEDICAL ATTENTION.</b> |
| <b>SECTION VII - SPILL OR LEAK PROCEDURES</b>   |   |
| <b>Spill Response</b>   | COVER THE CONTAMINATED SURFACE WITH SODIUM BICARBONATE (BAKING SODA), OR SLAKED LIME AND ADD WATER TO FORM A SLURRY. SCOOP UP SLURRY AND WASH DOWN SITE WITH SODIUM BICARBONATE SOLUTION.   |
| <b>Waste Disposal Method</b>  | DILUTE WITH WATER, ADJUST ph WITH SODIUM BICARBONATE TO A ph <b>ABOVE</b> 6.0, THEN FLUSH TO SANITARY SEWER OR SEND TO SANITARY LANDFILL, FOLLOWING LOCAL, STATE AND FEDERAL REGULATIONS  |
| <b>SECTION VIII - SPECIAL PROTECTION INFORMATION</b>  |   |
| <b>Eye Protection</b>   | WHEN EYE CONTACT MAY OCCUR, WEAR SAFETY GLASSES CHEMICAL SPLASH GOGGLES.  |
| <b>Skin Protection</b>  | WEAR RUBBER GLOVES.   |
| <b>Ventilation</b>  | NORMAL ROOM VENTILATION.  |
| <b>Respiratory Protection</b>   | NONE REQUIRED   |
| <b>Other Protection</b>   | NEOPRENE APRON AND GLOVES   |
| <b>SECTION IX - SPECIAL PRECAUTIONS</b>   |   |
| <b>Precautions in Handling and Storage</b>  | <b>KEEP OUT OF REACH OF CHILDREN.</b> KEEP AWAY FROM OXIDIZING AGENTS AND ALKALIES. RINSE CONTAINERS BEFORE DISPOSAL. REPORTABLE UNDER RCRA.  |
| <b>Other Precautions</b>  | SAFETY SHOWER, EYE BATH AND WASHING FACILITIES SHOULD BE AVAILABLE.   |
| <b>PREPARED BY: David Brunton, Chemist</b>  |   |
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