OM0106

HILLSBORO ELEMENTARY SCHOOLS

215 S.E. 6th Ave.
HILLSBORO, OR 97123

MATERIAL SAFETY DATA SHEET CM 0041

SECTION I

PRODUCT CODE NUMBER: _____ *TLV: _____

MANUFACTURER'S NAME: Scholle Corporation EMERGENCY INFORMATION: 312-562-7290

MANUFACTURER'S ADDRESS: 200 Wesr North Ave., Northlake, Ill 60164

PRODUCT: Electrolyte Battery Acid COMMON NAME: _____

GENERIC NAME: _____ CHEMICAL NAME: _____

CHEMICAL FAMILY _____ DOT PROPER SHIPPING NAME _____

WARNING STATEMENTS: _____

SECTION II - INGREDIENTS

	CAS #	%	TLV
Sulfuric Acid	7664-93-9	34-36 Wt.	1ppm/MG/M^3

* Threshold limit value set by (A) OSHA, (B) ACGIH, (C) See Section III, (D) Other, (NE) Not Established (Units are in PPM unless otherwise specified)

SECTION III - PHYSICAL DATA

APPROXIMATE BOILING RANGE: 203 °F VAPOR PRESSURE: _____

VAPOR DENSITY: Heavier SOLUBILITY IN WATER: _____

SPECIFIC GRAVITY: _____ PERCENT VOLATILE: 100% weight per gallon 10.54

EVAPORATION RATE: Slower than ether APPROXIMATE BULK DENSITY: _____

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT RANGE: N.A. EXTINGUISHING MEDIA: Alcohol foam, CO2, dry chem

FIRE FIGHTING PROCEDURES: _____ DOT FLAMMIBILITY CLASSIFICATION: OSHA Corrosive Liquid DOT Corrosive Liquid UN2796

UNUSUAL FIRE AND EXPLOSION HAZARDS: See attached

SECTION V - EMERGENCY AND FIRST AID PROCEDURES

See attached Immediately irrigate effected area with water for at least 15 minutes. ~~Does not contain PCB's.~~

SECTION VI - PHYSIOLOGICAL EFFECTS AND HEALTH INFORMATION

ACUTE EFFECTS: TLV: 1mg/M^3 per 8 hour day (also see attached)
extremely corrosive. Causes severe burns. Repeated contact may cause skin and eye irritation. Repeated inhalation of mist may cause inflammation of lungs.

CHRONIC EFFECTS:

SECTION VII - REACTIVITY DATA

STABILITY (Conditions to Avoid): Stable. All contact with organic substances

INCOMPATIBILITY (Materials to Avoid): Incompatible with all metals and organic substances.

HAZARDOUS DECOMPOSITION PRODUCTS:

HAZARDOUS POLYMERIZATION (Conditions to Avoid): Will not occur.

SECTION VIII - SPILL OR LEAK PROCEDURES

PROCEDURES IN CASE OF RELEASE OR SPILL: In case of spill, wash entire affected area with plenty of water. If water is not available, use sand or ashes. Do not use cloth, sawdust or any other combustibles.

WASTE DISPOSAL METHOD: Neutralize with Bicarbonate of Soda and dilute with water.

SECTION IX - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

VENTILATION:

PROTECTIVE GLOVES: Rubber gloves.

EYE PROTECTION: Chemical safety goggles

OTHER PROTECTIVE EQUIPMENT: Rubber apron, face shield

SECTION X - STORAGE AND SPECIAL PRECAUTIONS

HANDLING AND STORING PRECAUTIONS: Store in a cool dry place fully protected from mositure and severe weather. Avoid all handling and storage procedures that may result in spills, leaks, punctures. Only handle and store where an unlimited water supply is available.

OTHER PRECAUTIONS:

SECTION XI - DOCUMENTARY INFORMATION

PRODUCT CODE NUMBER:

ISSUE DATE: February 1985

REPLACES MSDS NUMBER:

PREVIOUS PRODUCT CODE NUMBER:

PREVIOUSLY ISSUED:

These general rules are the basis of proper first aid for contact with sulfuric acid:

First aid must be started immediately, since delay can result in serious injury.

Call a physician as soon as possible, no matter how slight the injury appears to be.

All contaminated clothing must be removed immediately. Flush affected areas of the body with copious quantities of water until all traces of sulfuric acid are removed.

Do not neutralize the acid with mild alkaline solutions until all areas of contact have been thoroughly washed with plentiful amounts of running water.

In case of severe or extensive burns, shock symptons -- rapid pulse, sweating, collapse -- might appear at any time. When they do, place the patient on his back and keep him warm, not hot, until a physician arrives. Do not give anything by mouth to an unconscious patient.

In case of eye contact with sulfuric acid:

Wash the eyes with copious quantities of running water for 15 minutes. Hold the eye lids apart to make sure the water washes all tissues of the surface of the eyes and lids. Do not use hot water.

A physician, preferably an eye specialist, must be called immediately. If he does not arrive within 15 minutes, eye irrigation should be resumed for a second 15-minute period. After the first irrigation, two or three drops of 0.5% pontocaine solution or equally effective aqueous topical anesthetic may be placed in the eyes by a qualified first aid man. Do not use any other solution or ointment.

If sulfuric acid has been taken internally, call a physician immediately. Do not induce vomiting. Do not give anything by mouth to an unconscious patient.

If the patient is conscious, have him wash out his mouth with copious quantities of water. Then have him drink milk, preferably mixed with the whites of eggs. If milk and egg whites are not available, have the patient drink as much water as possible.

Any accidental contact with sulfuric acid, whether external or internal should be described to the physician in detail at the time that he is called. He should be given the exact location of the patient.

Remove to fresh air.

Avoid repeated contact with skin and repeated breathing of vapors.

BATTERY COUNCIL INTERNATIONAL SPECIFICATIONS

Electrolyte shall be a solution of sulphuric acid in pure water at the specific gravity required by the procuring agency. The capacity and performance requirements though are based on the electrolyte gravity of 1.265 ± .005 regardless of the gravity at which the batteries are used in service.

The first-class sulphuric acid used in preparing this electrolyte shall conform to the requirements of the latest issue of Federal Specifications O-S-801-b.

Electrolyte used for filling dry-charged batteries shall conform to the specification as stated in this B.C.I. Yearbook, which is quoted below:

a. Scope: This specification covers sulphuric acid electrolyte for use in dry-charged storage batteries within a specific gravity range of 1.200 to 1.300 Sp. Gr. at 80°F (26.7°C).

b. Requirements: This specific gravity of the electrolyte shall be as ordered with a tolerance of plus or minus .003.

Specific gravity shall be determined by a hydrometer calibrated at 80°F/80°F. (26.7°C./26.7°C.).

The H_2SO_4 content shall coincide with specific gravity (plus or minus .12%).

Impurities in the electrolyte shall not exceed the maximum limits shown in the table below:

Impurity	Maximum Limit Per Cent
Organic Matter	To pass test defined in Federal Specification O-S-801-b, 4-14-65
Fixed residue	.075
Iron (Fe)	.003
Sulfurous Acid (SO_2)	.0015
Arsenic (As)	.00004
Antimony (Sb)	.00004
Manganese (Mn)	.000007
Nitrates (NO_3)	.0002
Ammonium (NH_4)	.0004
Chloride (Cl)	.004
Copper (Cu)	.0025
Zinc (Zn)	.0015
Selenium (Se)	.0007
Nickel (Ni)	.00004
Platinum (Pt)	To pass test defined in Federal Specification O-S-801-b, 4-14-65