

KOEHLER MANUFACTURING CO -- BATTERY FLUID, ACID -- 6230-01-160-5625

=====
Product Identification
=====

Product ID: BATTERY FLUID, ACID

MSDS Date: 04/02/1992

FSC: 6230

NIIN: 01-160-5625

Status Code: A

MSDS Number: CKSGZ

=== Responsible Party ===

Company Name: KOEHLER MANUFACTURING CO

Address: 123 FELTON ST

City: MARLBOROUGH

State: MA

ZIP: 01752

Country: US

Info Phone Num: 800-456-2200

Emergency Phone Num: 800-

645-8265

CAGE: 34141

=== Contractor Identification ===

Company Name: KOEHLER MANUFACTURING CO

Address: 123 FELTON ST

Box: City: MARLBOROUGH

State: MA

ZIP: 01752

Country: US

Phone: 800-456-2200

CAGE: 34141

=====
Composition/Information on Ingredients
=====

Ingred Name: SULFURIC ACID

CAS: 7664-93-9

RTECS #: WS5600000

= Wt: 38.

OSHA PEL: 1 MG/M3

ACGIH TLV: 1 MG/M3

ACGIH STEL: 3 MG/M3

EPA Rpt Qty: 1000 LBS

DOT Rpt Qty: 1000 LBS

=====
Hazards Identification
=====

Routes of Entry: Inhalation: YES Skin: YES Ingestion: YES
Reports of Carcinogenicity: NTP: NO IARC: YES OSHA: NO
Health Hazards Acute and Chronic: TARGET ORGANS: NONE. SKIN CONTACT:
CAUSES SEVERE BURNS TO SKIN, EYES AND ALL BODY TISSUES. INHALATION:
INHALATION OF MIST MAY CAUSE LUNG DAMAGE. INGESTION: CAUSES
CORROSION OF MUCOSAL SURFACES. ACUTE/ CHRONIC: SHORT TERM EXPOSURE
TO BODY TISSUES CAUSES IRRITATION AND BURNS. PROLONGED OR REPEATED
EXPOSURE MAY CAUSE ULCERATION. INHALATION CAN ERODE DENTAL SURFACES
AND ATTACK UPPER RESPIRATORY PASSAGE S. CONTINUED EXPOSURE CAN
RESULT IN SHORTNESS OF BREATH, COUGHING, ETC., REQUIRING MEDICAL
ATTENTION.
Explanation of Carcinogenicity: SULFURIC ACID: IARC MONOGRAPHS, VOL 54,
PG 41, 1992: GROUP 1.
Effects of Overexposure: SKIN AND EYES: REDNESS AND IRRITATION, BURNS
AND ULCERATION. INHALATION: IRRITATION, SHORTNESS OF BREATH, LUNG
AND THROAT DAMAGE.
Medical Cond Aggravated by Exposure: INDIVIDUALS WITH A HISTORY OF LUNG
DISEASE MAY HAVE AN INCREASED INCIDENCE OF TOXIC EFFECTS DUE TO
REPEATED EXPOSURE.

=====
===== First Aid Measures =====

First Aid: EYE CONTACT: IMMEDIATELY FLUSH THE EYES W/WATER FOR AT LEAST
15 MINUTES. CALL A PHYSICIAN. DO NOT TRANSPORT THE VICTIM BEFORE
THE 15-MINUTE FLUSH IS COMPLETE. SKIN CONTACT: IMMEDIATELY FLUSH
AFFECTED AREA W/WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED
CLOTHING AND SHOES. CALL A PHYSICIAN. DO NOT TRANSPORT THE VICTIM
UNTIL THE 15-MINUTE FLUSH IS COMPLETE. INHAL: REMOVE THE VICTIM TO
FRESH AIR . HAVE VICTIM LIE DOWN AND REMAIN QUIET. USE ARTIFICIAL
RESPIRATION IF BREATHING HAS STOPPED OR GIVE OXYGEN IF BREATHING IS
DIFFICULT. CALL A PHYSICIAN. INGEST: DO NOT INDUCE VOMITING. GIVE
LARGE QUANTITIES OF WATER. CALL A PHYSICIAN.

=====
===== Fire Fighting Measures =====

Flash Point: WILL NOT BURN
Extinguishing Media: USE MEDIA APPROPRIATE FOR

COMBUSTIBLES IN AREA.

Fire Fighting Procedures:USE NIOSH APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT . DO NOT GET WATER INSIDE CONTAINERS. USE WATER SPRAY TO COOL CONTAINERS EXPOSED TO HEAT FROM FIRE.

Unusual Fire/Explosion Hazard:REACTS WITH MOST METALS, ESPECIALLY WHEN DILUTE, TO GENERATE HYDROGEN GAS WHICH CAN BE EXPLOSIVE.

===== Accidental Release Measures =====

Spill Release Procedures:STOP THE FLOW IF POSSIBLE. DIKE THE SPILL WITH INORGANIC ABS

ORBENT TO PREVENT ITS SPREAD. CAUTIOUSLY NEUTRALIZE WITH LIME OR SODA ASH AND TRANSFER TO SUITABLE CONTAINERS FOR DISPOSAL. WEAR APPROPRIATE PROTECTIVE GEAR.

Neutralizing Agent:LIME OR SODA ASH.

===== Handling and Storage =====

Handling and Storage Precautions:STORE IN A COOL PLACE OUT OF SUN & AWAY FROM SOURCES OF HEAT, SPARKS OR FLAME. KEEP CONTAINER TIGHTLY CLOSED TO PREVENT LEAKAGE. IF PURCHASED IN DRUMS OR OTHER LARGE CONTAINERS, VENT

CONTAINERS WHEN RECEIVED & WEEKLY THEREAFTER. DO NOT USE PRESSURE TO UNLOAD CONTAINERS.

Other Precautions:WHEN EMPTY, RETURNABLE CONTAINERS MUST BE SHIPPED IN ACCORDANCE WITH FEDERAL REGULATIONS. RESIDUAL PRODUCT MUST BE REMOVED & BUNGS MUST BE TIGHTLY CLOSED. **DO NOT SMOKE IN STORAGE AREAS DUE TO THE POSSIBLE PRESENCE OF HYDROGEN.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:USE NIOSH APPROVED ACID GAS CHEMICAL CARTRIDGE RESPIRATOR OR FULL FACE RESPIRATOR WITH ACID GAS CARTRIDGE. FOR UNKNOWN ATMOSPHERES, USE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS.

Ventilation:LOCAL EXHAUST: SHOULD BE USED TO REMOVE ACID VAPORS WHEREVER POSSIBLE. MECHANICAL: RECOMMENDED.

Protective Gloves:ACID-PROOF GAUNTLET GLOVES.

Eye Protection:CLOSE FITTING CHEMICAL SPLASH GOGGLES AND FULL FACESHIELD.

Other Protective Equipment:ACID PROOF APRON AND CLOTHING, RUBBER BOOTS WITH TROUSERS WORN OUTSIDE THE BOOTS. HAVE

AVAILABLE NIOSH APPROVED

RESPIRATORY PROTECTION AS ABOVE.

Work Hygienic Practices:WASH ALL CONTAMINATED EQUIPMENT AND CLOTHING
WITH SOAP AND WATER BEFORE REUSE.

Supplemental Safety and Health

PHYSICAL DATA: DENSITY: 10.8 LBS/GAL.

===== Physical/Chemical Properties =====

HCC:C1

Melt/Freeze Pt:=-73.7C, -101.F

Vapor Pres:8 MMHG @ 15C

Vapor Density:>1 (AIR=1)

Spec Gravity:1.290 (H*2O=1) (15C)

Evaporation Rate & Reference: