

FISHER SCIENTIFIC, CHEMICAL DIV. -- OIL OF VITRIOL,A-298 -- 6810-00-227-1845

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Product Identification
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Product ID:OIL OF VITRIOL,A-298

MSDS Date:07/26/1993

FSC:6810

NIIN:00-227-1845

MSDS Number: BDKTQ

=== Responsible Party ===

Company Name:FISHER SCIENTIFIC, CHEMICAL DIV.

Address:1 REAGENT LANE

City:FAIR LAWN

State:NJ

ZIP:07410

Country:US

Info Phone Num:201-796-7100 OR 201-796-7523

Emerg

ency Phone Num:201-796-7100/800-424-9300(CHEMTREC)

CAGE:22527

=== Contractor Identification ===

Company Name:FISHER SCIENTIFIC CO

Address:2000 PARK LN

Box:City:PITTSBURGH

State:PA

ZIP:15275

Country:US

Phone:412-490-8586

CAGE:22527

Company Name:HACH COMPANY

Address:100 DAYTON RD.

Box:907

City:AMES

State:IA

ZIP:50010

Country:US

Phone:800-227-4224

CAGE:4T252

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Composition/Information on Ingredients
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Ingred Name:SULFURIC ACID (SARA III)

CAS:7664-93-9

RTECS #:WS5600000

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fraction by Wt: 70- 100%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9394
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:WATER
CAS:7732-18-5
RTECS #:ZC0110000
Fraction by Wt: 0 - 30%
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:RAT,LC50:510MG/M3/2H;LD50:2140MG/KGRTECS
Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Haza
rds Acute and Chronic:TARGET ORGANS:EYE, SKIN, RESPIRATORY &
GI TRACTS. CORROSIVE! CAUSES SEVERE EYES & SKIN BURNS. VAPOR
EXTREMELY IRRITATING TO RESPIRATORY TRACT. CONTACT WITH EYES MAY
RESULT IN BLINDNESS. SWALLOWING MAY BE FATAL. INHALATION MAY
DAMAGE RESPIRATORY TRACT. CHRONIC EXPOSURE MAY CAUSE DENTAL
EROSION, DERMATITIS, BRONCHITIS.
Explanation of Carcinogenicity:NONE
Effects of Overexposure:SEVERE EYE, SKIN, RESPIRATORY AND
GASTROINTESTINAL TRACTS IRRITATION AND B
URNING, VISUAL IMPAIRMENT,
DENTAL EROSION, NASAL SECRETION, SNEEZING, SHALLOW AND RAPID
BREATHING, A BURNING/TICKLING SENSATIO N FOLLOWED BY COUGH,
UNCONSCIOUSNESS, POSSIBLE CHARRING OF SKIN, MOUTH, THROAT AND
ESOPHAGUS PAIN, BLINDNESS
Medical Cond Aggravated by Exposure:OPEN WOUNDS AND SORES, RESPIRATORY
AILMENTS SUCH AS EMPHYSEMA AND BRONCHITIS

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

First Aid:GET MEDICAL ATTENTION IMMEDIATELY. EYE/SKIN:IMMED
IATELY FLUSH
WITH WATER FOR 15-20 MINUTES. HOLD EYELIDS OPEN. CONTINUE RINSING
WITH NORMAL SALINE UNTIL PH=7. INHALED:REMOVE TO FRESH AIR &
PROVIDE OXY GEN/CPR IF NEEDED. ORAL:DO NOT INDUCE VOMITING. IF
CONSCIOUS, DRINK LARGE AMOUNT OF WATER/MILK. INGESTED ACID MUST BE
DILUTED ABOUT 100 FOLDS. IF VOMITING OCCURS, KEEP HEAD BELOW HIPS.

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

Flash Point:NONFLAMMABLE
Extinguishing Media:USE DRY CHEMICALS OR CARBON

DIOXIDE BASE FIRE

EXTINGUISHERS TO FIGHT SURROUNDING FIRES. DO NOT USE WATER ON ACID.

Fire Fighting Procedures:APPLY EXTINGUISHING MEDIA FROM FARTHEST POSSIBLE DISTANCE. WEAR SCBA AND FULL PROTECTIVE CLOTHING. COOL EXTERIOR OF STORAGE CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard:VIOLENT REACTION WITH WATER. EVOLUTION OF EXPLOSIVE HYDROGEN GAS ON CONTACT WITH MOST METALS. WILL REACT WITH ORGANIC MATERIAL YIELDING HEAT & DENSE WHITE FUMES

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Accidental Release Measures =====

Spill Release Procedures:WEAR PROTECTIVE EQUIPMENTS. REMOVE IGNITION SOURCES(H2 MAY BE PRESENT). KEEP COMBUSTIBLES AWAY. STOP LEAK IF POSSIBLE. VENTILATE & NEUTRALIZE WITH SODA ASH/LIME. ABSORB WITH NEUTRAL MATERIAL. SCOOP IN TO DRUM. DO NOT GET WATER INSIDE CONTAINER/SPILL.

Neutralizing Agent:SUITABLE ALKALI SUCH AS LIME OR SODA ASH

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Handling and Storage =====

Handling and Storage Precautions

:STORE IN TIGHTLY CLOSED CONTAINER, AWAY FROM LIGHT & INCOMPATIBLE MATERIALS. KEEP OUT OF REACH OF CHILDREN.

Other Precautions:WHEN DILUTING, SLOWLY ADD ACID TO WATER WHILE STIRRING, TO AVOID SPATTERING, BOILING AND ERUPTION. DO NOT STRIKE CONTAINERS OR FITTINGS WITH TOOLS. STORE AWAY FROM SOURCES OF IGNITION. EMPTIED CONTAINER WILL RETAIN PRODUCT RESIDUE.

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Exposure Controls/Personal Protection =====

Respiratory Protection:USE NIOSH APPROVED, FULL-FACED RESPIRATOR WITH CANISTER APPROVED FOR SULFURIC ACID VAPOR & MIST. CONSULT RESPIRATOR MANUFACTURER TO DETERMINE APPROPRIATE EQUIPMENT. IF CONCENTRATIONS ARE HIGH/UNKNOWN, USE SELF-CONTAINED BREATHING APPARATUS.

Ventilation:PROVIDE VENTILATION TO CONTROL EXPOSURE LEVELS BELOW AIRBORNE EXPOSURE LIMITS. USE LOCAL EXHAUST VENTILATION.

Protective Gloves:RUBBER

Eye Protection:SPLASH-PROOF CHEMICAL SAFETY GOGGLES

Other Protective Equipment:PROTECTIVE CLOTHING, RUBBER FOOTWEAR, A

CID

RESISTANT HOOD AND FULL BODY SUIT RECOMMENDED, SAFETY SHOWER,
EYEWASH.

Work Hygienic Practices:OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES AND
RECOMMENDED PROCEDURES.

Supplemental Safety and Health

COMPOSITION AND PERCENTAGE: 93.0 MINIMUM BY WEIGHT SULFURIC ACID (TOTAL
ITEM RECORD, TIR).

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

HCC:C1

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:B.P. Text:626F,330C

Melt/Freeze Pt:M.P/F.P Text:50.0F,10.0C

Decomp Temp:De

comp Text:644F,340C

Vapor Pres:0.001 @68F

Vapor Density:3.4

Spec Gravity:1.84

pH: