

NATIONAL DRAEGER, INC. -- 4594878 SULFURIC ACID -- 6810-00-146-7515  
===== Product Identification =====

Product ID:4594878 SULFURIC ACID  
MSDS Date:06/26/1986  
FSC:6810  
NIIN:00-146-7515  
MSDS Number: BGWGL  
=== Responsible Party ===  
Company Name:NATIONAL DRAEGER, INC.  
Address:101 TECHNOLOGY DR  
Box:120  
City:PITTSBURGH  
State:PA  
ZIP:15230  
Country:US  
Info Phone Num:412-787-8383  
Emergency Phone Num:412-787-8383  
CAGE:53833  
=== Contractor Identification ===  
Company Name:NATIONAL DRAEGER INC  
Address:101 TECHNOLOGY DRIVE  
Box:City:PITTSBURGH  
State:PA  
ZIP:15372  
Country:US  
Phone:412-787-8383 OR 412-787-8389  
CAGE:53833

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

Ingred Name:SULFURIC ACID (SARA III)  
CAS:7664-93-9  
RTECS #:WS5600000  
Fraction by Wt: 98%  
Other REC Limits:NONE STATED  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3; 9192  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:WATE

R  
CAS:7732-18-5  
RTECS #:ZC0110000  
Fraction by Wt: 2%

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Hazards Identification  
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LD50 LC50 Mixture:LD50 ORAL RAT=2140MG/KG  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Effects of Overexposure:CONTACT MAY CAUSE PERMANENT DAMAGE TO EYES,  
SEVERE BURNS AND ULCERATION OF SKIN. INHALATION CAUSES UPPER  
RESPIRATORY IRRITATION AND POSSIBLE PULMONARY EDEMA. INGESTION  
CAUSES SEVERE INJURIES

Medical Cond Aggravated by Exposure:RESPIRATORY CONDITIONS WILL BE  
AGGRAVATED BY BREATHING ACID MISTS.

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First Aid Measures  
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First Aid:EYES/SKIN: FLUSH WITH PLENTY OF WATER. SEE DOCTOR  
IMMEDIATELY. REMOVE CONTAMINATED CLOTHING AND SHOES. INHALATION:  
REMOVE TO FRESH AIR. GIVE OXYGEN/CPR IF NEEDED. SEE DOCTOR.  
INGESTION: GIVE MILK OR WATER, FOLLOWED BY 2 OUNCES OF MILK OF  
MAGNESIA (NO CARBONATES). SEE DOCTOR IMMEDIATELY.

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Fire Fighting Measures  
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Flash Point:NONE  
Extinguishing Media:DRY CHEMICAL, CARBON DIOXIDE.  
Fire Fighting Procedures:WEAR SCBA, FACE SHIELD AND FULL PROTECTIVE  
CLOTHING. COOL FIRE EXPOSED CONTAINERS WITH WATER. USE WATER SPRAY  
TO ABSORB CORROSIVE VAPORS.  
Unusual Fire/Explosion Hazard:ACID MAY EMIT TOXIC FUMES UNDER FIRE.  
WATER WILL CAUSE HEAT GENERATION, BOIL OVER, AND SPLATTER.

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Accidental Release Measures  
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Spill Release Procedures:WEAR APPROPRIATE PROTECTIVE EQUIPMENT. DILUTE  
CAUTIOUSLY WITH WATER. COVER WITH SODA ASH OR QUICKLIME. SCOOP UP  
AND PLACE IN APPROPRIATE DISPOSAL CONTAINER.  
Neutralizing Agent:SODA ASH (SODIUM CARBONATE) OR QUICKLIME (CALCIUM  
OXIDE).

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Handling and Storage  
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Handling and Storage Precautions:STORE AWAY FROM IGNITION SOURCES AND  
COMBUSTIBLE MATERIALS.AVOID CONTACT WITH ORGANIC MATERIALS.  
Other Precautions:NEVE

DO NOT ADD WATER DIRECTLY TO CONCENTRATED SULFURIC ACID, AS SPLATTERING MAY OCCUR.

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

Respiratory Protection: GAS MASK WITH ACID GAS CANISTER, SUPPLIED AIR RESPIRATOR OR SCBA AS APPROPRIATE FOR THE EXPOSURE OF CONCERN.

Ventilation: LOCAL EXHAUST.

Protective Gloves: RUBBER

Eye Protection: SPLASH-PROOF GOGGLES.

Other Protective Equipment: RUBBER APRON AND BOOTS. EYES WASH STATION AND SAFETY SHOWER.

Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health

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

HCC: C1

Boiling Pt: B.P. Text: 536F, 280C

Melt/Freeze Pt: M.P/F.P Text: 37.0F, 2.8C

Vapor Pres: 0.001

Vapor Density: 3.4

Spec Gravity: 1.8

Solubility in Water: COMPLETE

Appearance and Odor: COLORLESS TO DARK BROWN OILY LIQUID.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

BASES, OXIDIZERS, REDUCING AGENTS, METAL POWDERS, AND ORGANIC MATERIAL.

Stability Condition to Avoid: HEAT

Hazardous Decomposition Products: SULFUR DIOXIDE AND SULFUR TRIOXIDE.

===== Disposal Considerations =====

Waste Disposal Methods: CONSULT YOUR LOCAL ENVIRONMENTAL OFFICER. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

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