

ASHLAND CHEMICAL INC -- AMMONIUM HYDROXIDE REAG ACS 4X8# CS -- 6810-00-753-4784  
===== Product Identification =====

Product ID:AMMONIUM HYDROXIDE REAG ACS 4X8# CS

MSDS Date:06/01/1990

FSC:6810

NIIN:00-753-4784

MSDS Number: BPF DN

=== Responsible Party ===

Company Name:ASHLAND CHEMICAL INC

Box:2219

City:COLUMBUS

State:OH

ZIP:43216

Country:US

Info Phone Num:614-790-3333, 614-889-3844

Emergency Phone N

um:800-274-5263

CAGE:5A188

=== Contractor Identification ===

Company Name:ASHLAND CHEMICAL CO

Address:5200 PAUL BLAZEL MEMORIAL PARKWAY

Box:City:DUBLIN

State:OH

ZIP:43017

Country:US

Phone:614-889-4505

CAGE:5A188

Company Name:ASHLAND CHEMICAL,ELECTRONIC AND LAB PRODUCTS DIV

Address:RD 4

Box:350

City:EASTON

State:PA

ZIP:18044

Country:US

Phone:215-258-9135

CAGE:86143

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

Ingred Name:AMMONIUM HYDROXIDE (SARA III)

CAS:1336-21-6

RTECS

#:BQ9625000  
Fraction by Wt: 72%  
Other REC Limits:35 PPM NH3 STEL  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:WATER  
CAS:7732-18-5  
RTECS #:ZC0110000  
Fraction by Wt: 28%  
Other REC Limits:NONE SPECIFIED

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

LD50 LC50 Mixture:LD50:ORAL RAT 350 MG/KG  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:EYES: CAN CAUSE SEVERE IRRITATION,  
AND  
SEVERE OR PERMANENT DAMAGE. SKIN: CAN CAUSE SEVERE IRRITATION,  
BLISTERS, AND BURNS. INHALATION: MAY CAUSE IRRITATION OF  
RESPIRATORY TRACT WITH SEVERE EXPOSURES R ESULTING IN PULMONARY  
EDEMA. INGESTION:CAN CAUSE IRRITATION AND BURNS TO STOMACH, MOUTH,  
THROAT, ETC.  
Effects of Overexposure:EYES: IRRITATION, REDNESS, TEARING, BLURRED  
VISION, PERMANENT DAMAGE. SKIN: IRRITATION BLISTERS, BURNS.  
INHALATION: LUNG IRRITATION, COUGHING, DIFFICULTY BREATHING,  
SHORTNESS  
OF BREATH, PULMONARY EDEM A. INGESTION: IRRITATION AND  
BURNS TO MOUTH, THROAT, STOMACH, NAUSEA, VOMITING, DIARRHEA.  
Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING DISEASES  
INVOLVING THE EYES, SKIN OR RESPIRATORY TRACT MAY BE AT INCREASED  
RISK FROM EXPOSURE.

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

First Aid:EYES: FLUSH WITH LARGE AMOUNTS OF WATER. GET MEDICAL  
ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. FLUSH AREA WITH  
LARGE AMOU  
NTS OF WATER. GET MEDICAL ATTENTION. INHALATION: MOVE TO  
FRESH AIR. IF NOT BREATHING GIVE CPR. IF BREATHING DIFFICULT GIVE  
OXYGEN. GET MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING.  
DILUTE BY GIVING WATER. GIVE MILK OF MAGNESIA.KEEP WARM,QUIET. GET  
MEDICAL ATTENTION.

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

Extinguishing Media:WATER FOG.  
Fire Fighting Procedures:WEAR NIOSH/MSHA APPROVED SCBA WITH FULL  
FACEPIECE OPERATED IN POSITIVE PRESSU

RE DEMAND MODE AND FULL BODY  
PROTECTION WHEN FIGHTING FIRES.

Unusual Fire/Explosion Hazard:USE WATER TO KEEP FIRE-EXPOSED CONTAINERS  
COOL UNTIL FIRE IS OUT.CLOSED CONTAINERS MAY RUPTURE OR EXPLODE DUE  
TO PRESSURE BUILD-UP WHEN EXPOSED TO EXTREME HEAT.

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

Spill Release Procedures:ABSORB SMALL SPILL ON VERMICULITE, FLOOR  
ABSORBENT, OR OTHER ABSORBENT MATERIAL AND TRANSFER TO HOOD. FLUSH  
AREA WITH WATER. DIKE LAR

GE SPILLS TO PREVENT SPREADING. RECOVER  
LIQUID AND COVER RESIDUE WI TH ABSORBENT. SHOVEL WASTE INTO  
CONTAINERS.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:KEEP IN TIGHTLY CLOSED CCONTAINERS.  
STORE IN COOL, DRY, VENTILATED AREA AWAY FROM INCOMPATIBLE  
MATERIALS. PROTECT AGAINST PHYSICAL DAMAGE.

Other Precautions:CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN  
EMPTIED  
, SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR,  
LIQUID, AND/OR SOLID).

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

Respiratory Protection:IF WORKPLACE EXPOSURE LIMITS OF PRODUCT IS  
EXCEEDED, A NIOSH/MSHA APPROVED AIR-SUPPLIED RESPIRATOR IS ADVISED  
IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. ENGINEERING OR  
ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

Ventilation:PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL  
EXHAU

ST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV.

Protective Gloves:NEOPRENE, NITRILE RUBBER, BUTYL RUBBER.

Eye Protection:CHEMICAL SPLASH GOGGLES, FACESHIELD.

Other Protective Equipment:IMPERVIOUS PROTECTIVE CLOTHING TO PREVENT  
REPEATED OR PROLONGED SKIN CONTACT.

Work Hygienic Practices:WASH AFTER HANDLING AND BEFORE EATING,  
DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

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

HCC:B1

Boiling Pt:B.P. Text:82.0F,27.8C

Vapor Pres:570 @ 20C

Vapor Density:0.6(AIR=1)

Spec Gravity:0.899

Evaporation Rate & Reference:SLOWER THAN ETHER.

Solubility in Water:INFINITE

Appearance and Odor:CLEAR, COLORLESS SOLUTION, AMMONIA ODOR.

Percent Volatiles by Volume:100%

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

Stability Indicator/Materials to Avoid:YES

STRONG ACIDS, HYPOCHLORITES, STRONG ALKALIES, BRASS, SILVER, COPPER,  
ALKALI METALS, IRON, METALLIC ME

RCURY.

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:EMITS TOXIC FUMES OF AMMONIA AND  
NITRIC OXIDES WHEN HEATED TO DECOMPOSITION.

Conditions to Avoid Polymerization:CANNOT OCCUR.

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

Waste Disposal Methods:DISPOSE OF WASTE IN ACCORDANCE WITH LOCAL, STATE  
AND FEDERAL REGULATIONS.

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