

OCCIDENTAL CHEMICAL CORP DIV OCCIDENTAL PETROLEUM -- ANHYDROUS AMMONIA --  
6830-00-169-0777

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

Product ID:ANHYDROUS AMMONIA

MSDS Date:06/01/1985

FSC:6830

NIIN:00-169-0777

MSDS Number: CCMHL

=== Responsible Party ===

Company Name:OCCIDENTAL CHEMICAL CORP DIV OCCIDENTAL PETROLEUM

Address:345 THIRD ST

Box:728

City:NIAGARA FALLS

State:NY

ZIP:14302

Country:US

Info Phon

e Num:716-278-7000

Emergency Phone Num:716-278-7000

CAGE:32618

=== Contractor Identification ===

Company Name:JONES CHEMICALS INC

Address:1201 PCIFIC AVE SUITE 1101

Box:City:TACOMA

State:WA

ZIP:98422

Country:US

Phone:716-538-2314

CAGE:6M624

Company Name:OCCIDENTAL CHEMICAL CORPORATION

Box:UNKNOW

CAGE:09287

Company Name:OCCIDENTAL CHEMICAL CORPORATION

Address:360 RAINBOW BLVD S

Box:728

City:NIAGARA FALLS

State:NY

ZIP:14302

Country:US

Phone:1-800-733-3665

CAGE:32618

===== Composition/Inf

Information on Ingredients =====

Ingredient Name:AMMONIA (SARA 302/313) (CERCLA)  
CAS:7664-41-7  
RTECS #:BO0875000  
Fraction by Wt: 100%  
Other REC Limits:25 PPM  
OSHA PEL:50 PPM  
ACGIH TLV:25 PPM/35 STEL; 9596  
EPA Rpt Qty:100 LBS  
DOT Rpt Qty:100 LBS

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

LD50 LC50 Mixture:STEL 35 PPM - 27 MG/M3  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:SEVERE IRRITANT OF EYES, RESPIRATORY TRACT AND SKIN. EXPOSURE MAY CAUSE BURNING AND TEARING OF EYES, RUNNY NOSE, COUGHING, CHEST PAIN, CESSATION OF RESPIRATION, DEATH. MAY CAUSE SEVERE BREATHING DIFFICULTIES WHICH MAY BE DELAYED IN ONSET. MAY PRODUCE TEMPORARY BLINDNESS. LIQUID MAY CAUSE PERMANENT EYE DAMAGE.

Explanation of Carcinogenicity:THIS COMPOUND CONTAINS NO INGREDIENTS AT CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT CARCINOGENS.

Effects of Overexposure:BURNING AND TEARING OF EYES, RUNNY NOSE, COUGHING, CHEST PAIN, CESSATION OF RESPIRATION, DEATH, BREATHING DIFFICULTIES, TEMPORARY OR PERMANENT BLINDNESS & SEVERE BURNS.  
Medical Conditions Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:EYES: FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER.  
R. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. INHALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. GET MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING. GIVE 1-2 GLASSES OF WATER IF CONSCIOUS. GET MEDICAL ATTENTION.

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

Flash Point:NONFLAMMABLE  
Lower Limits:16%  
Upper Limits:27%  
Extinguishing Media:WATER SPRAY, FOG, FOAM, DRY CHEMICALS, CO2 OR OTHER AGENTS AS APPROPRIATE FOR MATERIALS IN THE FIRE.  
Fire Fighting

ting Procedures:FIRE FIGHTERS SHOULD WEAR SELF CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. COOL TANKS AND CONTAINERS EXPOSED TO FIRE WITH WATER.  
Unusual Fire/Explosion Hazard:EXCESSIVE HEAT WILL FORM NITROGEN OXIDES.

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

Spill Release Procedures:KEEP UNPROTECTED PEOPLE AWAY. STAY UPWIND OF SOURCE. PERSONNEL INVOLVED IN CLEAN-UP MUST WEAR FULL PROTECTIVE EQUIPMENT AND SELF-CONTAINED BREATHING APPARATUS.  
CONTAMINATED AREA  
AND EQUIPMENT SHOULD B E THOROUGHLY WASHED DOWN WITH WATER.  
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN COOL, DRY, WELL VENTILATED, FIRE RESISTANT AREA SEPARATE FROM ACIDS AND OXIDIZING GASES. AVOID COPPER, COPPER ALLOY, ALUMINUM ALLOY.  
Other Precautions:NONE SPECIFIED BY MANUFACTURER.

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

Respiratory Protection:USE NIOSH/MSHA APPROVED AMMONIA VAPOR RESPIRATOR FOR AREAS WHERE AIRBORNE EXPOSURE IS EXCESSIVE.  
Ventilation:PROVIDE GOOD GENERAL ROOM VENTILATION TO MINIMIZE EXPOSURE. USE LOCAL EXHAUST VENTILATION AT POINTS OF GASEOUS EMISSION.  
Protective Gloves:VINYL, NEOPRENE OR RUBBER  
Eye Protection:SIDE SHIELDS OR CHEMICAL GOGGLES  
Other Protective Equipment:CHEMICAL RESISTANT CLOTHING AS NECESSARY TO PREVENT SKIN CONTACT. AN EMERGENCY EYEWASH AND SHOWER SHOULD BE

AVAILABLE.

Work Hygienic Practices:WASH HANDS THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.  
Supplemental Safety and Health  
NONE SPECIFIED BY MANUFACTURER.

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

HCC:B1  
Boiling Pt:=-33.C, -27.4F  
Melt/Freeze Pt:=-78.C, -108.4F  
Decomp Temp:Decomp Text:NOT GIVEN  
Vapor Pres:NOT GIVEN  
Vapor Density:NOT GIVEN  
Spec Gravity:0.7  
Evaporation Rate & Reference:NOT GIVEN  
Solubility in Water

:APPRECIABLE

Appearance and Odor:COLORLESS GAS, PUNGENT ODOR

Percent Volatiles by Volume:100%

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

Stability Indicator/Materials to Avoid:YES

SILVER, MERCURY, HALOGENS, COPPER, COPPER ALLOYS, ALUMINUM ALLOYS, & GALVANIZED SURFACES.

Stability Condition to Avoid:HEAT, IGNITION SOURCES, OXIDIZING GASES, CHLORINE, BROMINE, IODINE, & ACIDS.

Hazardous Decomposition Products:PRODUCTS OF DECOMPOSITION INCLUDE OXIDES OF NITROGEN

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

Waste Disposal Methods:DILUTE WITH WATER & DRAIN TO WASTE TREATMENT FACILITIES IF ALLOWABLE. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, & LOCAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.