ASHLAND CHEMICAL CO -- NITRIC ACID 42 DEGREE -- 6810-00-237-2918
========== Product Identification ==========

Product ID:NITRIC ACID 42 DEGREE
MSDS Date:01/06/1998
FSC:6810
NIIN:00-237-2918
MSDS Number: BDLXQ
=== Responsible Party ===
Company Name:ASHLAND CHEMICAL CO
Box:2219
City:COLUMBUS
State:OH
ZIP:43216
Country:US
Info Phone Num:614-790-3333
Emergency Phone Num:606-324-1133
Resp. Party Other MSDS Nu
m.:999.0001000-008.003
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

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

Ingred Name:NITRIC ACID (SARA III)
CAS:7697-37-2
RTECS #:QU5775000
= Wt:67.
OSHA PEL:2 PPM/4 STEL
ACGIH TLV:2 PPM/4 STEL; 9192
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:WATER
CAS:7732-18-5
RTECS #

:ZC0110000
Minumum % Wt:31.
Maxumum % Wt:35.

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

LD50 LC50 Mixture:NOT PROVIDED
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Health Hazards Acute and Chronic:EYE: CAN CAUSE PERMANENT EYE INJURY. CAN INJURE CORNAE & CAUSE BLINDNESS. SKIN: CAN CAUSE PERMANENT SKIN DAMAGE. SWALLOWING: SWALLOWING MATERIAL MAY BE HARMFUL. MAY CAUSE BURNS & DESTROY TISSUE IN MO UTH, THROAT & DIGESTIVE TRACT. LOW BLOOD PRESSU
RE & SHOCK MAY OCCUR AS RESULT OF SEVERE TISSUE INJURY. INHALATION: BREATHING OF VAPOR OR MIST IS POSSIBLE. BRATHING MAY BE HARMFUL OR FATAL.
Explanation of Carcinogenicity:NOT PROVIDED
Effects of Overexposure:EYES: STINGING, TEARING, REDNESS & SWELLING OF EYES. SKIN: REDNESS, BURNING & SWELLING OF SKIN, BURNS & OTHER SKIN DAMAGE. SWALLOWING: SEVERE STOMACH & INTESTINAL IRRITATION (NAUSEA, VOMITING, DIARRH EA), ABDOMINAL PAIN, VOMITING OF BLOOD.
Medical Cond Aggravated by Ex
posure:PREEXISTING CONDITIONS OF FOLLOWING ORGANS (OR ORGAN SYSTEMS) MAY BE AGGREVATED BY EXPOSURE TO MATERIAL: SKIN, LUNG (FOR EXAMPLE, ASTHMA-LIKE CONDITIONS).

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

First Aid:EYES: IMMEDIATELY FLUSH GENTLY WITH WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS APART. IF SYMPTOMS DEVELOP DUE TO VAPOR EXPOSURE MOVE FROM EXPOSURE. GET MEDICAL HELP. SKIN: REMOVE CONTAMINATED CLOTHES. FLUSH AREA WITH LARGE AMOU
NTSOF WATER. IF SKIN IS DAMAGED, GET MEDICAL HELP. IF SYMPTOMS CONTINUE, GET MEDICAL HELP. LAUNDER CLOTHES BEFORE REUSE. INGESTION: GET IMMEDIATE MEDICAL HELP. DO N OT INDUCE VOMITING. IF CONSCIOUS, RINSE MOUTH WITH WATER & GIVE WATER OR MILK TO DRINK. INHALATION: MOVE TO FRESH AIR. GET IMMEDIATE MEDICAL HELP. IF NOT BREATHING GIVE CPR. IF BREATHING DIFFICULT, GI VE OXYGEN. KEEP WARM & QUIET.

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

Lower Lim

its:NOT APPLICAB
Upper Limits:NOT APPLICAB
Extinguishing Media:WATER FOG
Fire Fighting Procedures:WATER MAY BE USED TO KEEP FIRE-EXPOSED CONTAINERS COOL UNTIL FIRE IS OUT. WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WITH APPROPRIATE T URN-OUT GEAR & CHEMICAL RESISTANT PERSONAL PROTECTIVE EQUIPMENT. SEE PERSONAL PROTECTIVE EQUIPMENT SECTION OF THIS MSDS.
Unusual Fire/Explosion Hazard:REACTS WITH MOST METALS TO REL
EASE HYDROGEN GAS WHICH CAN FORM EXPLOSIVE MIXTURE WITH AIR.

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

Spill Release Procedures:SMALL: COVER WITH SODIUM BICARBONATE OR SODA ASH/FLAKED LIME MIX (50-50). MIX WITH WATER TO FORM SLURRY. SCOOP UP SLURRY & WASH SITE WITH SODA ASH SOLUTION. LARGE: PREVENT RUN-OFF TO SEWERS, STREAMS O R OTHER WATERS BODIES. IF RUN-OFF OCCURS, NOTIFY AUTHORITIES. DIKE TO PREVENT SPREAD. PUMP TO SALVAGE TANK. EXCLUDE FRO
M AREA PERSONS NOT WEARING PROPER PROTECTIVE EQUIPMENT.
Neutralizing Agent:SODIUM BICARBONATE OR SOAD ASH/FLAKED LIME MIXTURE (50-50)

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

Handling and Storage Precautions:CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIES CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARDOUS PRECAUTIONS GIVEN IN DATA SHEET MUST BE OBSERVE D.
Other Precautions:ADDITION OF WATER REL
EASES HEAT WHICH CAN RESULT IN VIOLENT BOILING & SPLATTERING. ALWAYS ADD SLOWLY & IN SMALL AMOUNTS. NEVER USE HOT WATER. NEVER ADD WATER TO ACIDS. ALWAYS ADD ACIDS TO WATER.

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

Respiratory Protection:IF EXPOSURE LIMITS ARE EXCEEDED, A NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MSHA RESPIRATORS (NEGATIV E PRESSU

RE TYPE) UNDER SPECIFIED
CONDITIONS (SEE YOUR INDUSTRIAL HYGIENIST). ENGINEERING OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.
Ventilation:PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S)
Protective Gloves:RESISTANT GLOVES (CONSULT YOUR SAFETY EQUIPMENT SUPPLIER)
Eye Protection:CHEMICAL SPLASH GOGGLES & FACE SHIELD (8 IN MIN)
Other Protective Equipment:TO PREVENT SKIN CONTACT WEAR IMPERVIOUS CLO
THING & BOOTS.
Work Hygienic Practices:NOT PROVIDED
Supplemental Safety and Health

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

HCC:C1
Boiling Pt:=117.8C, 244.F
Vapor Pres:6.8 MMHG @ 68F
Vapor Density:> 1.0
Spec Gravity:1.408
Evaporation Rate & Reference:SLOWER THAN ETHER
Solubility in Water:COMPLETE
Appearance and Odor:FUMING WHITE TO YELLOW LIQUID
Percent Volatiles by Volume:100

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

Stability Indica
tor/Materials to Avoid:YES
ORGANIC MATERIALS, REDUCING AGENTS, STRONG ALKALIES. REACTS WITH MOST METALS TO RELEASE HYDROGEN GAS WHICH CAN FORM EXPLOSIVE MIXTURES WITH AIR.
Hazardous Decomposition Products:NITROGEN COMPOUNDS, ACID FUMES

========== Toxicological Information ==========

Toxicological Information:NO DATA

========== Ecological Information ==========

Ecological:NO DATA

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

=====

Waste Disposal Methods:SCOOP UP AND PLACE IN SUITABLE CONTAINER OR PUMP TO SALVAGE TANK TO AWAIT PROPER DISPOSAL. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE & FEDERAL REGULATIONS.

========== MSDS Transport Information ==========

Transport Information:DOT DESCRIPTION: NITRIC ACID, 8, UN2031, II

========== Regulatory Information ==========

SARA Title III Information:SARA 302 TPQ = 1000 LB, RQ = 1000 LB. SECTION 311/312 CLASS: IMMED
IATE. NITRIC ACID IS A SARA 313 CHEMICAL.
Federal Regulatory Information:CERCLA RQ = 1000 LB
State Regulatory Information:CALAFORNIA PROP 65: NOT APPLICABLE. NITRIC ACID IS A NEW JERSEY & A PENNSYLVANIA RIGHT TO KNOW CHEMICAL.