View NSN Online: https://aerobasegroup.kr/nsn/9150-01-113-2047

Product ID: FYRQUEL 220 MLT MSDS Date:10/23/1998 FSC:9150 NIIN:01-113-2047 MSDS Number: CFFGQ === Responsible Party === Company Name: AKZO NOBEL CHEMICAL INC Address:5 LIVINGSTONE AVE City:DOBBS FERRY State:NY ZIP:10522 Country:US Info Phone Num:800-666-1200 Emergency Phone Num:914-693-6946 Resp. Party Other MSDS Num.:16-084436 Chemtrec Ind/Phone:(800)424-9300 CAGE:01GF0 === Contractor Identification === Company Name: AKZO NOBEL CHEMICALS INC Address:300 S. RIVERSIDE PLAZA Box:City:CHICAGO State:IL ZIP:60606-6613 Country:US Phone:312-906-7500 TECH: 800-828-792 CAGE:97854 Company Name: AKZO NOBEL CHEMICALS INC. Address:5 LIVINGSTONE AVE Box:City:DOBBS FERRY State:NY ZIP:10522 Country:US Phone:800-666-1200 CAGE:01GF0

Ingred Nam

e:TRIPHENYL PHOSPHATE CAS:115-86-6 RTECS #:TC8400000 Minumum % Wt:15. Maxumum % Wt:25. Other REC Limits:NONE RECOMMENDED OSHA PEL:3 MG/M3 ACGIH TLV:3 MG/M3; 9596

Ingred Name:BUTYLATED TRIPHENYL PHOSPHATE MIXTURE Minumum % Wt:75. Maxumum % Wt:85. Other REC Limits:NONE RECOMMENDED

LD50 LC50 Mixture:LD50(RAT) >5000MG/KG Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic: MAY CAUSE MILD SKIN/EYE IRRITATION. INHALATION OF VAPOR/MIST MAY CAUSE RESPIRATORY TRACT IRRITATION. TRIPHENYL PHOSPHATE MAY CAUSE CHOLINESTERASE INHIBITION AT LEVELS ABOVE EXPOSURE LIMITS. INHALATION : VAPOR/MIST MAY CAUSE RESPIRATORY TRACT IRRITATION. TRIPHENYL PHOSPHATE CAN CAUSE CHOLINESTERASE INHIBITION. SKIN: CONTACT MAY CAUSE MILD IRRITATION. EYE: CONTACT MAY CAUSE MILD IRRITATION. INGESTION: MAY CAUSE **IRRITATION OF GASTROINTESTI** NAL SYSTEM & DIARRHEA. INGESTION OF TRIPHENYL PHOSPHATE, A COMPONENT, MAY CAUSE CHOLINESTERASE INHIBITION. TARGET ORGANS: SKIN, EYES, RESPIRATORY SYSTEM, CENTRAL NERVOUS SYSTEM. Explanation of Carcinogenicity:PER MSDS:CARCINOGENICITY: IARC/NTP/OSHA/ACGIH: NO. Effects of Overexposure: EYE/SKIN: MAY CAUSE MILD IRRITATION. INGESTION: MAY CAUSE IRRITATION OF GI SYSTEM & DIARRHEA. INGESTION OF TRIPHENYL PHOSPHATE MAY CAUSE CHOLINESTERASE INHIBITION -HEADACHE, NAUSEA, SWEAT ING, NUMBNESS, TINGLING OF HANDS/FEET, SALIVATION, MUSCLE TWITCHING, TREMORS, INCOORDINATION, BLURRED VISION, TEARS, ABDOMINAL CRAMPS, DIARRHEA, CHEST DISCOMFORT. Medical Cond Aggravated by Exposure: PERSONS WITH PRE-EXISTING NEUROMUSCULAR DISORDERS MAY BE AT AN INCREASED RISK FROM EXPOSURE TO MATERIAL.

First Aid:INHALATION: MOVE TO FRESH AIR. IF NOT BREATHING GIVE CPR OR OXYGEN IF BREATHING DIFFICULT. SKI

N: REMOVE CONTAMINATED CLOTHES. WASH ALL AFFECTED AREAS WITH SOAP & PLENTY WATER. GET MEDICAL HELP IF IRRI TATION PERSISTS. WASH CONTAMINATED CLOTHES BEFORE REUSE. CLEAN OR DESTROY CONTAMINATED SHOES. EYES: IMMEDIATELY FLUSH WITH PLENTY RUNNING WATER. REMOVE CONTACTS. HOLD EYELIDS OPEN. GET MEDICAL HELP. I NGESTION: CALL PHYSICIAN OR POISON CONTROL CENTER. DO NOT INDUCE VOMITING UNLESS SO DIRECTED BY MEDICAL PERSONNEL. IF VOMITING OCCURS, KEEP HEAD BELOW HIPS TO REDUC E RISK OF ASPERATION. NEVER GIVE ANY THING BY MOUTH IF UNCONSCIOUS. Flash Point Method: PMCC Flash Point:=246.1C, 475.F Autoignition Temp:Autoignition Temp Text:N/D Lower Limits:N/D Upper Limits:N/D Extinguishing Media:WATER FOG OR SPRAY, DRY CHEMICAL, FOAM OR CARBON DIOXIDE. Fire Fighting Procedures: WEAR FULL-FACE, SELF-CONTAINED BREATHING GEAR & IMPERVIOUS CLOTHING. KEEP FIRE EXPOSED CONTAINERS COOL WITH WATER FOG OR SPRAY TO PREVENT RUPTURE. HIGH PRESSURE WATER MAY SPREAD PRODUCT FROM BROKEN CO NTAINERS & INCREASE CONTAMINATION OR FIRE

HAZARD. DIKE FIRE CONTROL WATER FOR LATER DISPOSAL. Unusual Fire/Explosion Hazard:PRODUCT NOT DEFINED AS FLAMMABLE/COMBUSTIBLE. IS SELF-EXTINGUISHING ONCE IGNITION SOURCE IS REMOVED. NOT SENSITIVE TO STATIC DISCHARGE OR PHYSICAL IMPACT. MAY DECOMPOSE UNDER FIRE CONDITIONS TO CARBON MONOXIDE. PHOSPHORU

MAY DECOMPOSE UNDER FIRE CONDITIONS TO CARBON MONOXIDE, PHOSPHORUS OXIDES, ORGANIC DECOMPOSITION PRODUCTS.

Spill Release Procedures: ISOLATE SPILL & RESTRICT ACCESS. CLEAN UP PERSONNEL SHOULD FOLLOW INDUSTRIAL HYGIENE PRACTICES. STOP SOURCE OF SPILL & DIKE. SOAK UP WITH ABSORBENT LIKE CLAY, SAWDUST, KITTY LITTER. SWEEP UP ABSORBED MATERIAL & PUT IN WASTE CONTAINER FOR DISPOSAL. SPILL AREA MAY BE SLIPPERY. CLEAN WITH DETERGENT & WATER. USE STIFF BRUSH TO CLEAN CRACKS. FLUSH WITH WATER BUT DO NOT ALLOW WATER T Handling and Storage Precautions:STORE IN COOL DRY WELL VENTILATED AREA AWAY FROM FLAMMABLES, OXIDIZERS, HEAT SOURCES. AVOID PROLONGED STORAGE AT ELEVATED TEMPERATURES UNDER ALKALINE/ACIDIC CONDITIONS. MAX STORAGE TEMP: 149F. CARBON STEEL IS PREFERRED STORAGE CONTAINER. ROTATE CONTAINERS REGULARLY & INSPECT FOR DAMAGE.

Other Precautions:WEAR PROTECTIVE CLOTHIN

G, CHEMICAL GOGGLES, RUBBER

GLOVES. AVOID SKIN/EYE CONTACT & INHALING VAPORS. EMPTY CONTAINERS MAY CONTAIN RESIDUES. STORE AWAY FROM FOOD OR ANIMAL FEED. BELOW 40F VISCOSITY CHA RACTERISTICS MAY REQUIRE PRODUCT HEATING TO PUMP IT. VENT BULGED DRUMS SLOWLY IN OPEN AREA.

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

Respiratory Protection:NIOSH-APPROVED ORGANIC/ACID GAS RESPIRATOR WITH DUST, MIST & FUME FILTER. IF HIGHER PROTECTION IS NEEDED US NIOSH

-APPROVED POSITIVE-PRESSURE, PRESSURE DEMAND, AIR-SUPPLIED RESPIRATOR. WHEN USING RESPI RATOR CARTRIDGES OR CANISTERS, THEY MUST BE CHANGED FREQUENTLY (FOLLOWING USE OR END OF WORK SHIFT).

Ventilation:AT ELEVATED TEMPERATURS OR AIRBORNE VAPOR HANDLE IN WELL VENTILATED AREA. OTHERWISE USE NIOSH-APPROVED POSITIVE-PRESSURE AIR-SUPPLIED RESPIRATOR.

Protective Gloves: COMBINATION NEOPRENE OVER NATURAL LATES GLOVES RECOMMENDED

Eye Protection: CHEMICAL SAFETY GOGGLES OR FACE SHIELD Ot

her Protective Equipment:SAFETY SHOWERS WITH QUICK OPENING VALVES, EYE WASH FOUNTAINS. WATER SUPPLIED THROUGH INSULATED HEAT TRACED LINES TO PREVENT FREEZING. LONG SLEEVED SHIRTS. Work Hygienic Practices:WASH CONTAMINAED CLOTHING BEFORE REUSE;

THOROUGHLY CLEAN OR DESTROY CONTAMINATED SHOES.

Supplemental Safety and Health

HCC:V6 Boiling Pt:B.P. Text:N/D Melt/Freeze Pt:M.P/F.P Text:N/D Vapor Pres: 2000 MG/KG. MATERI AL FOUND TO BE MILD SKIN IRRITANT IN RABBITS FOLLOWING 24 RH EXPOSURE. CONTACT DERMAL EXPOSURE FOR PRODUCT NOT KNOWN. HOWEVER, PROLONGED/REPEATED CONTACT MAY CAUSE IRRITATION.

Ecological:96 HR LC50 (RAINBOW TROUT): > 2 MG/L. TRIARYL PHOSPHATE ESTERS, INCLUDING TRIPHENYL PHOSPHATE, EXHIBIT LOW AQUEOUS SOLUBILITY, HAVE MODERATE POTENTIAL FOR BIOCONCENTRATION & READILY UNDERGO PRIMARY & ULTIMATE BIODEGR
ATION BY NATURALLY OCCURING MIXED-MICROBIAL POPULATIONS PRESENT IN ACTIVATED SLUDGE & RIVER WATER. CHEMICAL FATE: PRODUCT IS READILY BIODEGRADABLE. HYDROLYSIS RATE FOR TRIPHENYL PHOSPH ATE: PH = 9.5, HALF-LIFE 1.3 DAYS; PH = 8.2, HALF-LIFE 7.5 DAYS. AT NEUTRAL & ACIDIC PH: TO SLOW TO RELIABLY MEASURE.

Waste Disposal Methods:MATERIAL THAT CANNOT BE RECYCLED SHOULD BE DISPOSED OF IAW ALL APPLICABLE REGULA

TIONS. SINGLE USE PRODUCT

CONTAINERS MUST BE THOROUGHLY CLEANED. STATE/LOCAL REGULATIONS MEY BE MORE STRINGENT THAN FEDE RAL. UNUSED PRODUCT DOES NOT MEET RCRA CRITERIA AS LISTED OR CHARACTERISTIC WASTE. GENERATORS MUST E VALUATE WASTE STREAM. DRAIN CONTAINERS IAW REGS.

Transport Information:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (TRIPHENYL PHOSPHATE), CLASS 9, UN 3082, PG III, NORTH AMERIC AN EMERGENCY GUIDE NO. 171.

Federal Regulatory Information:TRIPHENYL PHOSPHATE LISTED ON TSCA. State Regulatory Information:TRIPHENYL PHOSPHATE SUBJECT TO FOLLOWING: DOMESTIC SUBSTANCE LIST-CANADA, MASSACHUSETTS SUBSTANCE LIST, NEW JERSEY RTK LIST, PENNSYLVANIA HAZARDOUS SUBSTANCE LIST.

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