FISHER SCIENTIFIC, CHEMICAL DIV. -- P-QUINONE, 20070, Q 36-500 -- 6810-01-448-9756 ============= Product Identification ======================== Product ID:P-QUINONE,20070,Q 36-500 MSDS Date:09/02/1997 FSC:6810 NIIN:01-448-9756 MSDS Number: CFTJF === Responsible Party === Company Name: FISHER SCIENTIFIC, CHEMICAL DIV. Address:1 REAGENT LANE City:FAIRLAWN State:NJ ZIP:07410 Country:US Info Phone Num:201-796-7100 OR 201-796-7523 Emergency Phone Num:201-796-7100/800-424-9300(CHEMTREC) CAGE:1B 464 === Contractor Identification === Company Name: FISHER SCIENTIFIC CO. CHEMICAL MFG DIV Address:1 REAGENT LANE Box:City:FAIRLAWN State:NJ ZIP:07410-2802 Country:US Phone:201-796-7100 CAGE:1B464 ======= Composition/Information on Ingredients ========= Ingred Name: QUINONE (SARA 313) (CERCLA) CAS:106-51-4 RTECS #: DK2625000 Fraction by Wt: 100%

Other REC Limits: NONE RECOMMENDED

OSHA PEL:0.1 PPM

ACGIH TLV:0.1 PPM; 9596

EPA Rpt Qty:10 LBS DOT Rpt Qty:10 LBS

======= Haz

LD50 LC50 Mixture:LD50 (ORAL, RAT) IS 130 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:TARGET ORGANS:CNS. ACUTE- TOXIC. EYE CONTACT MAY CAUSE SEVERE IRRITATION & POSSIBLY DAMAGE. HARMFUL IF INGESTED, INHALED/ABSORBED THROUGH SKIN. MAY CAUSE SKIN BURNS, CNS & HEART EFFECTS, DECREASED BLO OD PRESSURE, RESPIRATORY TRACT IRRITATION, METH

EMOGLOBINEMIA & POSSIBLE DEATH. CHRONIC- MAY CAUSE PERMANENT EYE DAMAGE.

Explanation of Carcinogenicity:QUINONE - IARC GROUP 3 CARCINOGEN, PER MSDS.

Effects of Overexposure:SEVERE IRRITATION, NAUSEA, VOMITING, ABDOMINAL PAIN, TEARING, BLURRED VISION, HEADACHE, FATIGUE, DIZZINESS, DROWSINESS, UNCONSCIOUSNESS, CONVULSIONS, POSSIBLE DEATH

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN DISORDERS, EYE PROBLEMS OR IMPAIRED CENTRAL NERVOUS SYSTEM OR RESPIRATO

RY FUNCTION MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS PRODUCT.

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

First Aid:GET MEDICAL ATTENTION. EYES:IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. HOLD EYELIDS OPEN. SKIN:WASH WITH PLENTY OF WATER & SOAP. INHALED:MOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NEEDED. ORAL:IF CONS CIOUS & ALERT, DRINK 2-4 CUPFULS OF MILK/WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. INDUCE VOMITING BY GIVI

NG 1 TEASPOON OF SYRUP OF IPECAC. NOTE TO PHYSICIAN:TREAT SYMPTOMATICALLY.

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

Flash Point:195F,91C

Autoignition Temp: Autoignition Temp Text: 815F

Extinguishing Media:USE WATER SPRAY, CARBON DIOXIDE (CO2), ALCOHOL FOAM OR DRY CHEMICAL. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

Fire Fighting Procedures:WEAR PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS. HAZARDOUS DECOMPOSITION PROD

UCTS MAY BE FORMED. Unusual Fire/Explosion Hazard:AS WITH ANY FINELY DIVIDED ORGANIC SOLID, DUST MAY BE EXPLOSIVE IF MIXED WITH AIR IN CRITICAL PROPORTIONS AND IN THE PRESENCE OF AN IGNITION SOURCE.
======== Accidental Release Measures ==========
Spill Release Procedures:WEAR PROTECTIVE EQUIPMENT. VENTILATE AREA. REMOVE IGNITION SOURCES. SWEEP UP SPILL. PLACE INTO A SUITABLE CONTAINER FOR REUSE OR DISPOSAL. AVOID DUST GENERATION. WASH SPILL SITE AFTER PI CKUP IS COMPLE TE. Neutralizing Agent:NOT RELEVANT
============ Handling and Storage ==============
Handling and Storage Precautions:STORE IN COOL, DRY, VENTILATED PLACE AWAY FROM IGNITION SOURCES & INCOMPATIBLES. KEEP CONTAINER TIGHTLY CLOSED. KEEP OUT OF REACH OF CHILDREN. Other Precautions:TOXIC! AVOID BREATHING DUSTS. AVOID CONTACT WITH EYES, SKIN OR CLOTHING. WASH THOROUGHLY AFTER HANDLING. DO NOT STORE OR CONSUME FOOD, DRINK OR TOBACCO IN AREAS WHERE TH EY MAY
BECOME CONTAMINATED WITH THIS MATERIAL. AVOID INGESTION.
====== Exposure Controls/Personal Protection ========
Respiratory Protection:NONE NORMALLY REQUIRED. IF TLV IS EXCEEDED OR FOR SYMPTOMS OF OVER EXPOSURE, WEAR NIOSH-APPROVED RESPIRATOR OR AIR-PURIFYING RESPIRATOR. IN EMERGENCY, WEAR A NIOSH-APPROVED POSITIVE-PRESSURE SELF-CONT AINED BREATHING APPARATUS. Ventilation:USE GENERAL OR LOCAL EXHAUST VENTILATION TO MEET TLV REQUIREMENTS. Protective Glov es:RUBBER, NEOPRENE Eye Protection:SAFETY GLASSES/CHEMICAL GOGGLES Other Protective Equipment:EYE WASH STATION, SAFETY SHOWER, PROTECTIVE CLOTHING Work Hygienic Practices:OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES AND
RECOMMENDED PROCEDURES. WASH BEFORE EATING OR DRINKING. Supplemental Safety and Health
========= Physical/Chemical Properties ==========

HCC:T3 NRC/State Lic Num:NOT RELEVANT Melt/Freeze Pt:M.P/F.P Text:235F,113C Vapor Pres:NEGLIGIBLE Vapor Density:3.7 pec Gravity:1.3180

Viscosity: NOT RELEVANT

Evaporation Rate & Evaporation Relevant

Solubility in Water:SLIGHT

Appearance and Odor:YELLOW OR GREEN SOLID, CHLORINE-LIKE ODOR

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

Stability Indicator/Materials to Avoid:YES
OXIDIZING AGENTS, SOME FORMS OF COATINGS, RUBBER AND PLASTICS
Stability Condition to Avoid:EXCESSIVE HEAT, MOISTURE, IGNITION SOURCES
Hazardous Decomposition Products:CARBON MONOXIDE, CARBON DIOXIDE

=======

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. RECYCLING OR REUSINS IS RECOMMENDED. RCRA WASTE NUMBER: U197

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 d

isclaims 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.