

FISHER SCIENTIFIC, CHEMICAL DIV. -- SP15 500,FISHER PERMOUNT -- 6640-01-087-2869

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Product Identification  
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Product ID:SP15 500,FISHER PERMOUNT

MSDS Date:09/02/1997

FSC:6640

NIIN:01-087-2869

Status Code:A

MSDS Number: CKLFR

=== Responsible Party ===

Company Name:FISHER SCIENTIFIC, CHEMICAL DIV.

Address:1 REAGENT LANE

City:FAIR LAWN

State:NJ

ZIP:07410

Country:US

Info Phone Num:201-796-7100

/703-527-3887 INTERNAT.

Emergency Phone Num:201-796-7100

Preparer's Name:NOT PROVIDED.

Chemtrec Ind/Phone:(800)424-9300

CAGE:1B464

=== 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

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Composition/Information on Ingredients  
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Ingred Name:TOLUENE

CAS:108-88-3

RTECS #:XS5250000

= Wt:55.17

Other REC Limits:NOT PROVIDED

OSHA PEL:SEE

TABLE Z-2

ACGIH TLV:188 MG/M3;50 PPM

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:PICCOLYTE (B-PINENE POLYMER)

CAS:68240-09-5

= Wt:44.85

Other REC Limits:NOT PROVIDED

OSHA PEL:NONE LISTED

ACGIH TLV:NONE LISTED

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

LD50 LC50 Mixture:NOT PROVIDED

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:TARGET ORGANS: KIDNEYS, HEART, CNS,  
LIVER. POTENTIAL HEALTH EFFECTS: EYE: CAUSES IRRITA

TION. MAY

RESULT IN CORNEAL INJURY. SKIN: MAY CAUSE IRRITATION. PROLONGED  
AND/OR REPEATED CONTACT MAY CAUSE IRRITATION AND/OR DERMATITIS.  
INGESTION: ASPIRATION HAZARD. MAY CAUSE IRRITATION OF DIGESTIVE  
TRACT. CAUSES EFFECTS SIMILAR TO THOSE FOR INHALATION. ASPIRATION  
OF MATERIAL INTO LUNGS MAY CAUSE CHEMICAL PNEUMONITIS, WHICH MAY  
BE FATAL. INHALATION: MAY CAUSE HEADACHE, DIZZINESS,  
UNCONSCIOUSNESS, COMA, RESPIRATORY IRRITATION, HEART DISTURBANCES  
LEADING TO CAR

DIAC ARREST, DEATH. CHRONIC: DERMATITIS, CARDIAC  
SENSITIZATION, LIVER, KIDNEY DAMAGE.

Explanation of Carcinogenicity:NOT LISTED BY ACGIH, IARC, NIOSH, NTP,  
OR OSHA.

Effects of Overexposure:EYE: CAUSES IRRITATION. MAY RESULT IN CORNEAL  
INJURY. VAPORS MAY CAUSE EYE IRRITATION. SKIN: MAY CAUSE  
IRRITATION. PROLONGED AND/OR REPEATED CONTACT MAY CAUSE IRRITATION  
AND/OR DERMATITIS. INGESTION: ASPIRATION HAZARD. MAY CAUSE  
IRRITATION OF DIGESTIVE TRACT. MAY CAUSE EFFECTS SIMILAR

TO THOSE

FOR INHALATION EXPOSURE. INHALATION: INHALATION OF HIGH  
CONCENTRATIONS MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS  
CHARACTERIZED BY HEADACHE, DIZZINESS, UNCONSCIOUSNESS AND COMA.  
INHALATION OF VAPOR MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY  
CAUSE HEART DISTURBANCES LEADING TO CARDIAC ARREST AND DEATH.

Medical Cond Aggravated by Exposure:NOT PROVIDED.

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

First Aid:EYES: FLUSH EYES WITH PLENTY OF WATER

R FOR AT LEAST 15

MINUTES, OCCASIONALLY LIFTING THE UPPER AND LOWER LIDS. GET MEDICAL AID IMMEDIATELY. SKIN: FLUSH SKIN WITH PLENTY OF SOAP AND WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. GET MEDICAL AID IF IRRITATION DEVELOPS OR PERSISTS. INGESTION: DO NOT INDUCE VOMITING. IF VICTIM IS CONSCIOUS AND ALERT, GIVE 2-4 CUPFULS OF MILK OR WATER. POSSIBLE ASPIRATION HAZARD. GET MEDICAL AID IMMEDIATELY. INHALATION: REMOVE FROM EXPOSURE

TO FRESH AIR IMMEDIATELY. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL AID.

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

Flash Point:=-7.2C, 45.F

Lower Limits:1.4

Upper Limits:6.7

Extinguishing Media:USE DRY CHEMICAL, CARBON DIOXIDE, OR ALCOHOL-RESISTANT FOAM. WATER MAY BE INEFFECTIVE. USE WATER SPRAY TO KEEP FIRE-EXPOSED CONTAINERS COOL.

Fire Fighting Procedures:AS IN ANY FIRE, WEAR A SELF CONTAINED

BREATHING APPARATUS IN PRESSURE-DEMAND, MSHA/NIOSH (APPROVED OR EQUIVALENT), AND FULL PROTECTIVE GEAR. WATER RUNOFF CAN CAUSE ENVIRONMENTAL DAMAGE. DIKE AND COLLECT WATER USED TO FIGHT FIRE. MATERIAL IS LIGHTER THAN WATER AND A FIRE MAY BE SPREAD BY THE USE OF WATER.

Unusual Fire/Explosion Hazard:CONTAINERS CAN BUILD UP PRESSURE IF EXPOSED TO HEAT AND/OR FIRE. VAPORS CAN TRAVEL TO A SOURCE OF IGNITION AND FLASH BACK. FLAMMABLE LIQUID. CAN RELEASE VAPORS THAT FORM EXPLOSIVE MIXTURES AT TEMPERATURES ABOVE THE FLASHPOINT.

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

Spill Release Procedures:USE PROPER PERSONAL PROTECTIVE EQUIPMENT. REMOVE ALL SOURCES OF IGNITION. ABSORB SPILL USING AN ABSORBENT, NON-COMBUSTIBLE MATERIAL SUCH AS EARTH, SAND OR VERMICULITE.

Neutralizing Agent:NOT RELEVANT

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

Handling and Storage Precautions:KEEP AWAY FROM SOURCES OF IGNITION

ON.

STORE IN A COOL, DRY, WELL-VENTILATED AREA AWAY FROM INCOMPATIBLE SUBSTANCES. USE WITH ADEQUATE VENTILATION. AVOID CONTACT WITH EYES, SKIN, CLOTHING.

Other Precautions: REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE. EMPTY CONTAINERS RETAIN PRODUCT RESIDUES (LIQUID AND/OR VAPOR) AND CAN BE DANGEROUS. AVOID CONTACT WITH HEAT, SPARKS AND FLAME. AVOID INGESTION AND INHALATION. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND/EXPOSE EMPTY CONTAINERS TO SPARKS OR OPEN FLAMES.

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

Respiratory Protection: FOLLOW THE OSHA RESPIRATOR REGULATIONS FOUND IN 29 CFR 1910.134. ALWAYS USE A NIOSH-APPROVED RESPIRATOR WHEN NECESSARY.

Ventilation: USE ADEQUATE GENERAL OR LOCAL EXHAUST VENTILATION TO KEEP AIRBORNE CONCENTRATIONS BELOW THE PERMISSIBLE EXPOSURE LIMITS.

Protective Gloves: WEAR APPROPRIATE PROTECTIVE GLOVES TO PREVENT SKIN EXPOSURE.

Eye Protection: WEAR APPROPRIATE EYEGLASSES OR CHEMICAL SAFETY GOGGLES PER OSHA 29 CFR 1910.133

Other Protective Equipment: WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT SKIN EXPOSURE.

Work Hygienic Practices: NOT PROVIDED.

Supplemental Safety and Health

NOTE TO PHYSICIAN: CAUSES CARDIAC SENSITIZATION TO ENDOGENOUS CATECHOLAMINES WHICH MAY LEAD TO CARDIAC ARRHYTHMIAS. DO NOT USE ADRENERGIC AGENTS SUCH AS EPINEPHRINE OR PSEUDOEPINEPHRINE.

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

HCC:

F2

NRC/State Lic Num: NOT RELEVANT

Boiling Pt: B.P. Text: NOT AVAILABLE

Melt/Freeze Pt: M.P/F.P Text: NOT AVAILABLE

Decomp Temp: Decomp Text: NOT AVAILABLE.

Vapor Pres: NOT AVAILABLE

Spec Gravity: NOT AVAILABLE

pH: NOT AVAILABLE

Viscosity: NOT AVAILABLE

Evaporation Rate & Reference: NOT AVAILABLE

Solubility in Water: INSOLUBLE

Appearance and Odor: YELLOW LIQUID - ODOR NONE REPORTED

Corrosion Rate: NOT PROVIDED.

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

Stability Indicator/Materi

als to Avoid: YES

BROMINE TRIFLUORIDE, DINITROGEN TETROXIDE, CONCENTRATED NITRIC ACID,  
NITRIC ACID + SULFURIC ACID, SILVER PERCHLORATE, STRONG OXIDIZERS.

Stability Condition to Avoid: INCOMPATIBLE MATERIALS, IGNITION SOURCES,  
EXCESS HEAT

Hazardous Decomposition Products: CARBON MONOXIDE, CARBON DIOXIDE

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

Toxicological Information: CAS# 108-88-3: INHALATION, MOUSE: LC50 = 400  
PPM/24H; INHALATION, RAT: LC50 = 49 GM/M3/4H; O

RAL, RAT: LD50 = 636

MG/KG; SKIN, RABBIT: LD50 = 12124 MG/KG. REPRODUCTIVE EFFECTS:

TOLUENE: EFFECTS ON FERTILITY SUCH AS ABORTION WERE REPORTED IN  
RABBITS BY INHALATION. PATERNAL EFFECTS WERE NOTED IN RATS BY  
INHALATION.

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

Ecological: ECOTOXICITY: TOLUENE: BLUEGILL LC50 = 17 MG/L/24H. SHRIMP  
LC50 = 4.3 PPM/96H. FATHEAD MINNOW LC50 = 36.2 MG/L/96H. SUNFISH  
(FRESH WATER) TLM = 1180 MG/L/96H. ENVIRONMENTAL

FATE: TOLUENE:

FROM SOIL, SUBSTANCE EVAPORATES AND IS MICROBIOLOGICALLY BIODEGRADED. IN  
WATER, SUBSTANCE VOLATILIZES AND BIODEGRADES. PHYSICAL/CHEMICAL:  
TOLUENE: PHOTOCHEMICALLY PRODUCED HYDROXYL RADICALS DEGRADE  
SUBSTANCE.

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

Waste Disposal Methods: DISPOSE OF IN A MANNER CONSISTENT WITH LOCAL,  
STATE AND FEDERAL REGULATIONS. RCRA U-SERIES: CAS# 108-88-3: WASTE  
NUMBER U220. CAS# 108-88-3 IS BANNED FROM LAND DIS

POSAL ACCORDING  
TO RCRA.

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

Transport Information: US DOT SHIPPING NAME: TOLUENE SOLUTION. HAZARD  
CLASS: 3. UN NUMBER: UN1294. PACKING GROUP: II. IMO: NO INFORMATION  
IS AVAILABLE. IATA: NO INFORMATION IS AVAILABLE.

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

SARA Title III Information: SECTION 302 (RQ): FINAL RQ = 1000 LBS (454  
KG). SECTION 302 (TPQ): NONE OF THE CHEMICALS IN THIS PRODUCT

HAVE

A TPQ. SARA CODES: CAS# 108-88-3: ACUTE, FLAMMABLE. SECTION 313: THIS MATERIAL CONTAINS TO LUENE (CAS# 108-88-3, 55.17%), WHICH IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 SARA TITLE III AND 40 CFR PART 373.

Federal Regulatory Information: CAS#108-88-3 IS LISTED ON THE TSCA INVENTORY. CAS# 68240-09-5 IS LISTED ON THE TSCA INVENTORY. OSHA: NONE OF THE CHEMICALS IN THIS PRODUCT ARE CONSIDERED HIGHLY HAZARDOUS BY OSHA. CLEAN AIR ACT: CAS # 108-88-3 IS

LISTED AS A HAZARDOUS AIR POLLUTANT (HAP). THIS MATERIAL DOES NOT CONTAIN ANY CLASS 1 OR CLASS 2 OZONE DEPLETORS. CLEAN WATER ACT: CAS # 108-88-3 IS LISTED AS A HAZARDOUS SUBSTANCE UNDER THE CWA. CAS # 108-88-3 IS LISTED AS A PRIORITY POLLUTANT UNDER THE CLEAN WATER ACT. CAS # 108-88-3 IS LISTED AS A TOXIC POLLUTANT UNDER THE CLEAN WATER ACT.

State Regulatory Information: TOLUENE CAN BE FOUND ON THE FOLLOWING STATE RIGHT TO KNOW LISTS: CALIFORNIA, NEW JERSEY, FLORIDA,

PENNSYLVANIA, MINNESOTA, MASSACHUSETTS. WARNING: THIS PRODUCT CONTAINS TOLUENE, A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS AND OTHER REPRODUCTIVE HARM.

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===== Other Information =====

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