HOECHST CELANESE -- AZ 4620 PHOTORESIST
MATERIAL SAFETY DATA SHEET
NSN: 675000N014850
Manufacturer’s CAGE: 2V751
Part No. Indicator: A
Part Number/Trade Name: AZ 4620 PHOTORESIST
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General Information
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Company’s Name: HOECHST CELANESE CORPORATION
Company’s Street: ROUTE 202-206 NORTH
Company’s City: SOMERVILLE
Company’s State: NJ
Company’s Country: US
Company’s Zip Code: 08876
Company’s Emerg Ph #: 201-231-4944
Company’s Info Ph #: 201-231-2566
Record No. For Safety Entry: 001
Tot Safety Entries This Stk#: 001
Status: SMJ
Date MSDS Prepared: 05SEP89
Safety Data Review Date: 28JUN95
MSDS Serial Number: BKMBV
Hazard Characteristic Code: F4
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Ingredients/Identity Information
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Proprietary: NO
Ingredient: 2-ETHOXYETHYL ACETATE (CELLOSOLVE ACETATE) (EGEEA)
Ingredient Sequence Number: 01
Percent: 48
NIOSH (RTECS) Number: KK8225000
CAS Number: 111-15-9
OSHA PEL: S,100 PPM
ACGIH TLV: S, 5 PPM; 9192
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Proprietary: NO
Ingredient: N-BUTYL ACETATE (SARA III)
Ingredient Sequence Number: 02
Percent: 5
NIOSH (RTECS) Number: AF7350000
CAS Number: 123-86-4
OSHA PEL: 150 PPM/200 STEL
ACGIH TLV: 150 PPM/200STEL;9192
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Proprietary: NO
Ingredient: XYLENES (O-,M-,P- ISOMERS) (SARA III)
Ingredient Sequence Number: 03
Percent: 5
NIOSH (RTECS) Number: ZE2100000
CAS Number: 1330-20-7
OSHA PEL: 100 PPM/150 STEL
ACGIH TLV: 100 PPM/150STEL;9192
Proprietary: NO
Ingredient: CRESOL NOVOLAK RESIN.
Ingredient Sequence Number: 04
CAS Number: 9065-82-1
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: 2,1,5-DIAZONAPHTHOQUINONE SULFONIC ACID (ESTERS WITH 2,3,4-
TRIHYDROXYBENZOPHENONE).
Ingredient Sequence Number: 05
CAS Number: 5610-94-6
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: SUPP DATA: N-BUTYL ACETATE: SKIN & EYE IRRIT; INHAL OF VAPS
HIGH CONC CAN CAUSE IRRIT OF EYES & RESP (SEE ING 7)
Ingredient Sequence Number: 06
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 6: TRACT AS WELL AS NARCOSIS; SYSTEMIC EFFECTS HAVE NOT
BEEN CONCLUSIVELY SHOWN A SINGLE STUDY REPORTS (SEE ING 8)
Ingredient Sequence Number: 07
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 7: N-BUTYL ACETATE TO HAVE CAUSED TERATOGENIC AND
REPRODUCTIVE EFFECTS IN RATS VIA INHAL; NO EVIDENCE (SEE ING 9)
Ingredient Sequence Number: 08
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 8: FOR THE LATTER HAS BEEN SEEN IN HUMANS.
Ingredient Sequence Number: 09
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Physical/Chemical Characteristics

Appearance And Odor: AMBER-RED LIQUID, CHARACTERISTIC ODOR.
Boiling Point: 124
Specific Gravity: 1.08
Evaporation Rate And Ref: <ETHER
Solubility In Water: FORMS 2 LAYERS
Percent Volatiles By Volume:  58

Fire and Explosion Hazard Data

Flash Point: 111°F, 44°C
Flash Point Method: TCC
Extinguishing Media: CO₂, WATER, ALCOHOL FOAM OR DRY CHEMICAL.
Special Fire Fighting Proc: USE NIOSH/MSHA APPROVED SCBA AND FULL
PROTECTIVE EQUIPMENT (FP N). USE WATER SPRAY TO COOL DRUMS IN FIRE
AREA.
Unusual Fire And Expl Hazards: SOLVENT VAPORS. EMITS TOXIC FUMES UNDER
FIRE CONDITIONS.

Reactivity Data

Stability: YES
Cond To Avoid (Stability): NONE SPECIFIED BY MANUFACTURER.
Materials To Avoid: OXIDIZING AGENTS, ALKALINE MATERIALS & STRONG
ACIDS.
Hazardous Decomp Products: THERMAL DECOMPOSITION MAY GENERATE CO₂, CO,
NOₓ AND SULFUR AS WELL AS VOLATILE ORGANIC RESIDUES.
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): NOT RELEVANT

Health Hazard Data

LD₅₀-LC₅₀ Mixture: SEE INGREDIENTS
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: NO
Health Haz Acute And Chronic: 2-ETHOXYETHYL ACETATE: LIQ & HIGH CONC OF
VAP ARE EYE & RESP TRACT IRRITANTS & MAY CAUSE KIDNEY DMG, NARCOSIS, &
PARALYSIS. IN STUDIES W/LAB ANIMALS, 2-ETHOXYETHYL ACETATE CAUSED BIRTH
DEFECTS, INCREASED FETAL DEATH, DELAYED FETAL DEVELOPMENT, BLOOD
EFFECTS,
TESTICULAR DMG & MALE INFERTILITY. THIS (SEE EFTS OF OVEREXP)
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: NOT RELEVANT
Signs/Symptoms Of Overexp: HLTH HAZ: PROD CONTAINS XYLENE, WHICH IS A
SKIN, EYE & MUC MEMB IRRITANT. ON INGEST, XYLENE CAUSES SEVERE GI
DISTRESS;
WHEN INHALED, HIGH CONC OF XYLENE VAPS CAUSE DIZZ, EXCITEMENT,
DROWSINESS,
INCOORDINATION, STAG GAIT, EYE, NOSE & THROAT IRRIT, & DERMAT. XYLENE
CHRONIC EXPOS IS SIMILAR TO ACUTE BUT SYMP (SUPP DATA)
Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER.
Emergency/First Aid Proc: INHAL: MOVE VICTIM TO FRESH AIR. CONSULT MD
IF
IRRIT OCCURS. EYE: FLUSH THORO W/WATER FOR AT LEAST 15 MIN. GET MD IMMED.
SKIN: IMMED REMOVE CONTAM CLTHG & WASH AFFECTED AREA THORO W/SOAP & WATER.
CONSULT MD IF EXPOS IS EXTENSIVE OR IRRIT OCCURS. INGEST: IF PERSON IS CONSCIOUS, GIVE WATER OR MILK TO DILUTE STOMACH CONTENTS. CALL MD.
ADDTNL MEASURES: ADMINISTER OXYGEN IF THERE IS DFCLT IN BRTHG.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: REMOVE ALL SPARKING DEVICES OR IGNITION SOURCES. PROVIDE VENT, WEARING APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT, CONTAIN SPILL, COLLECT ONTO INERT ABSORBENT. PLACE IN SUITABLE CONTAINER.
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Method: LISTED AS A HAZ SUBSTANCE, AS DEFINED IN THE COMPREHENSIVE ENVIRONMENT RESPONSE, COMPENSATION, AND LIABILITY ACT OF 1980. DISPOSE OF OR INCINERATE IN ACCORDANCE WITH REGULATIONS.
Precautions-Handling/Storing: STORE AT 30-70F. STORE IN ORIGINAL CONTAINER. TRANSPORT AND STORE UNDER DRY CONDITIONS TIGHTLY CLOSED AND PROTECTED FROM LIGHT.
Other Precautions: PRESSURE MAY BUILD UP SLOWLY IN CLOSED CONTAINERS DUE TO GRADUAL DECOMPOSITION. THIS IS ACCELERATED BY HEAT AND LIGHT WITH POSSIBLE LIBERATION OF COMBUSTIBLE SOLVENT VAPORS. KEEP AWAY FROM HEAT, SPARKS & FLAME.

Control Measures

Respiratory Protection: NIOSH/MSHA APPROVED CHEMICAL CARTRIDGE RESPIRATOR RECOMMENDED FOR EXPOSURES EXCEEDING TLV. SEE OTHER PRECAUTIONS.
Ventilation: USE LOCAL EXHAUST VENTILATION.
Protective Gloves: RUBBER GLOVES.
Eye Protection: CHEM WORK GOGGLES, FACESHLD OPTL (FP N).
Other Protective Equipment: CLOTHING SUITABLE TO PREVENT SKIN CONTACT.
Work Hygienic Practices: CONTACT LENSES SHOULD NOT BE WORN WHEN WORKING WITH THIS MATERIAL.
Suppl. Safety & Health Data: EFTS OF OVEREXP: ALSO INCLUDE HDCH, IMPAIRED MEMORY & WEAKNESS. DIRECT CONT W/XYLENE (LIQ) CAN CAUSE DERMAT; XYLENE IS READILY ABSORBED INTO SKIN; IT IS RPTD TO CAUSE REPRODUCTIVE EFFECTS & BIRTH DEFECTS IN RATS & MICE BUT THERE IS NO EVIDENCE OF THIS IN HUMANS.
XYLENE IS RPTD TO BE A MUTAGEN INVITRO. (SEE INGRED 6)

Transportation Data
Trans Data Review Date: 91240
DOT PSN Code: GJL
DOT Proper Shipping Name: FLAMMABLE LIQUIDS, N.O.S.
DOT Class: 3
DOT ID Number: UN1993
DOT Pack Group: III
DOT Label: FLAMMABLE LIQUID
IMO PSN Code: HIA
IMO Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. o
IMO Regulations Page Number: 3345
IMO UN Number: 1993
IMO UN Class: 3.3
IMO Subsidiary Risk Label: -
IATA PSN Code: MCA
IATA UN ID Number: 1993
IATA Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. *
IATA UN Class: 3
IATA Label: FLAMMABLE LIQUID
AFI PSN Code: MCA
AFI Prop. Shipping Name: FLAMMABLE LIQUIDS, N.O.S.
AFI Class: 3
AFI ID Number: UN1993
AFI Pack Group: III
AFI Basic Pac Ref: 7-7

Disposal Data

Label Data

Label Required: YES
Technical Review Date: 02JUL91
Label Status: G
Common Name: PHOTORESIST
Chronic Hazard: YES
Signal Word: WARNING!
Acute Health Hazard-Moderate: X
Contact Hazard-Moderate: X
Fire Hazard-Moderate: X
Reactivity Hazard-None: X
Special Hazard Precautions: ACUTE:HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. AVOID BREATHING VAPOR/MIST. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WASH THOROUGHLY AFTER HANDLING. CAUSES EYE AND SKIN IRRITATION.
COMBUSTIBLE LIQUID. KEEP AWAY FROM HEAT AND FLAME. CHRONIC:POSSIBLE BIRTH DEFECT HAZARD. CONTAINS MATERIAL WHICH MAY CAUSE BIRTH DEFECTS/REPRODUCTIVE DISORDERS BASED ON ANIMAL DATA.
Protect Eye: Y
Protect Skin: Y
Protect Respiratory: Y