

**FILE COPY
NOT FOR DISTRIBUTION****Hoechst Celanese**Hoechst Celanese Corporation
Printing Products Division
P.O. Box 3700
50 Melster Avenue
Somerville, NJ 08876-1258**Material Safety Data Sheet**THE EMERGENCY PHONE NUMBERS ARE: CHEMTREC (800) 424-9300
HOECHST CELANESE (908) 231-4944
FOR (NON EMERGENCY) PRODUCT INFORMATION CALL: (908) 231-5445

PAGE 1

-----PRODUCT IDENTIFICATION-----

PRODUCT NAME:
AZ 400T PHOTORESIST STRIPPER
SYNONYMS:
PHOTORESIST STRIPPER
CHEMICAL FAMILY:
BASIC ORGANIC SOLUTIONVERSION DATE: 05/30/91
DATE PRINTED: 05/30/91
MSDS NUMBER: 50007096

-----HAZARDOUS INGREDIENTS-----

INGREDIENT:	PERCENT:	HAZARD DATA:
TETRAMETHYLAMMONIUM HYDROXIDE, TMAH, CAS# 75-59-2	2	
* N-METHYLPYRROLIDONE, NMP, 1- METHYL-2-PYRROLIDINONE, CAS# 872-50-4	72	CONTACT HAZARD SEE EFFECTS OF OVEREXPOSURE
* PROPYLENE GLYCOL, 1,2-PROPANE- DIOL, CAS# 57-55-6	26	
* PENNSYLVANIA RIGHT TO KNOW LIST		

-----PHYSICAL DATA-----

PHYSICAL DATA	LOW	HIGH	UNITS	COMMENT
SOLUBILITY IN WATER				
% VOLATILE		>95		SOLUBLE
SPECIFIC GRAVITY (WATER =1)		1.03		
EVAPORATION RATE				

<ETHER

APPEARANCE AND ODOR:
COLORLESS LIQUID, CHARACTERISTIC ODOR.

-----FIRE AND EXPLOSION HAZARDS-----

FLASH POINT: >200 °F TAG CC

EXTINGUISHING MEDIA:
CARBON DIOXIDE, WATER, ALCOHOL FOAM OR DRY CHEMICAL.SPECIAL PROCEDURES:
USE SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING.
USE WATER SPRAY TO COOL DRUMS IN FIRE AREA.UNUSUAL HAZARDS:
SOLVENT VAPORS
EMITS TOXIC AND CORROSIVE FUMES UNDER FIRE CONDITIONS.

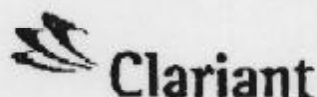
-----HEALTH INFORMATION-----

PRIMARY ROUTE OF EXPOSURE: INHALATION: YES SKIN ABSORPTION: YES INGESTION: NO
ALSO SKIN AND EYE CONTACT WITH LIQUID AND VAPORS.EFFECTS OF OVEREXPOSURE:
ALKALINE SOLUTION. MAY CAUSE SEVERE IRRITATION OR CAUSTIC BURNS TO
EYES AND MUCOUS MEMBRANES.
SOLUTIONS OF PH GREATER THAN 10 ARE KNOWN TO CAUSE CORNEAL DAMAGE.
D.O.T. FOUR HOUR RABBIT SKIN TEST OF THE HIGHEST COMMERCIAL
CONCENTRATION OF THIS PRODUCT WAS NEGATIVE FOR CORROSION.
N-METHYL PYRROLIDINONE IS AN EYE IRRITANT AND IS EMBRYOTOXIC AND FETO-
TOXIC AT HIGH DOSES. CONTINUED SKIN CONTACT CAN LEAD TO DERMATITIS.

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Material Safety Data Sheet

THE EMERGENCY PHONE NUMBERS ARE: CHEMTREC (800) 424-9300
CLARIANT CORPORATION (800) 835-5235
FOR (NON-EMERGENCY) PRODUCT INFORMATION CALL: (800) 235-2637 PAGE 2
PRODUCT NAME: AZ 400T PHOTORESIST STRIPPER MSDS NUMBER: 500070Q6

-----HEALTH INFORMATION----- (CONTINUED)

NMP IS AN EYE IRRITANT. IT IS FETOTOXIC AND PRODUCES FETAL SKELETAL ABNORMALITIES AT HIGH DOSES. SKIN CONTACT CAN LEAD TO DERMATITIS. NMP HAS SHOWN NERVOUS SYSTEM DEPRESSION, BONE MARROW AND LYMPH TISSUE EFFECTS. SOME TESTS IN RATS HAVE SHOWN TESTICULAR EFFECTS. IT WAS POSITIVE IN CHROMOSOME ABERRATION TESTING. TETRAMETHYLAMMONIUM HYDROXIDE IS CAUSTIC AND CORROSIVE TO SKIN AND EYES IN CONCENTRATED FORM.

THIS PRODUCT CONTAINS PROPYLENE GLYCOL, WHICH IS A SKIN AND EYE IRRITANT; IT HAS BEEN REPORTED TO CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION WHEN ADMINISTERED ORALLY AND HAS BEEN REPORTED TO BE AN IN-VITRO MUTAGEN.

MOST STANDARD MUTAGENICITY TESTS WITH PROPYLENE GLYCOL HAVE INDICATED THAT IT IS NOT MUTAGENIC. HOWEVER, IN ONE INVITRO TEST, IT WAS FOUND TO BE MUTAGENIC, AT ONE DOSE LEVEL.

TOXICITY:	ROUTE	TEST	DOSE	UNITS	COMMENTS
	SCU/MUS	LDLO	20	MG/KG	TMAH
	ORL/RAT	LD50	3.9	G/KG	NMP
	ORL/RAT	LD50	20	G/KG	PROPYLENE GLYCOL
	INH/RAT	LC50	>370	PPM	NMP/6HR
	DML/RBT	LD50	8.0	G/KG	NMP

MEDICAL CONDITIONS AGGRAVATED:
PREEXISTING SKIN, EYE AND RESPIRATORY CONDITIONS MAY BE AGGRAVATED.

CARCINOGEN: IARC: NO NTP: NO OSHA: NO

-----OCCUPATIONAL EXPOSURE LIMITS-----

T.L.V.: HCC WEL(1) 5 PPM

TEXT:

(1) 8 HR TWA (SKIN NOTATION).
NMP EXPOSURE: THE HOECHST CELANESE WORKPLACE EXPOSURE LEVEL (WEL) COMMITTEE HAS INCLUDED A "NO CONTACT" RECOMMENDATION FOR NMP DUE TO ITS SKIN ABSORPTION PROPERTIES.

-----EMERGENCY AND FIRST AID PROCEDURE-----

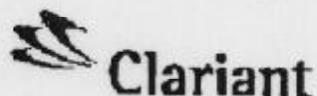
INHALATION:
MOVE VICTIM TO FRESH AIR. CONSULT PHYSICIAN IF IRRITATION OCCURS.

EYE CONTACT:
FLUSH THOROUGHLY WITH WATER FOR 15 MINUTES.
GET IMMEDIATE MEDICAL HELP.

SKIN CONTACT:
IMMEDIATELY REMOVE CONTAMINATED CLOTHING AND WASH AFFECTED AREA THOROUGHLY WITH WATER UNTIL GREASY FEEL IS GONE.
CONSULT PHYSICIAN IF IRRITATION OR OTHER SYMPTOMS OCCUR.

INGESTION:
IF PERSON IS CONSCIOUS, GIVE WATER OR MILK TO DILUTE STOMACH CONTENTS.
DO NOT INDUCE VOMITING.
CONSULT PHYSICIAN.

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-----EMERGENCY AND FIRST AID PROCEDURE----- (CONTINUED)

ADDITIONAL MEASURES:
NONE FOUND.

-----REACTIVITY DATA-----

CHEMICAL STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID:
AVOID CONTACT WITH STRONG ACIDS.
AVOID CONTACT WITH OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS:
THERMAL DECOMPOSITION MAY GENERATE
CARBON MONOXIDE, CARBON DIOXIDE AND OXIDES OF NITROGEN
IF HEATED TO DRYNESS, TMAH MAY DECOMPOSE TO TRIMETHYLAMINE AND METHANOL.

-----SPILL OR LEAK PROCEDURES/WASTE DISPOSAL-----

SPILL OR LEAK PROCEDURES:
WEARING APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT, CONTAIN SPILL,
REMOVE ALL SPARKING DEVICES OR IGNITION SOURCES.
VENTILATE AREA OF SPILL OR LEAK
COLLECT ONTO INERT ABSORBENT. PLACE IN SUITABLE CONTAINER.
RINSE RESIDUAL WITH WATER.

WASTE DISPOSAL:
DISPOSE OF OR INCINERATE IN ACCORDANCE WITH REGULATIONS.
PRODUCT WOULD BE CONSIDERED A HAZARDOUS WASTE UNDER RCRA DUE TO HIGH
PH UNLESS NEUTRALIZED PRIOR TO DISPOSAL.

-----EMPLOYEE PROTECTION-----

RESPIRATORY PROTECTION:
WHERE MIST IS PRESENT, PROVIDE LOCAL VENTILATION
OR A RESPIRATOR CERTIFIED FOR MIST BY NIOSH.

PROTECTIVE CLOTHING:
CLOTHING SUITABLE TO PREVENT SKIN CONTACT.
SAFETY GOGGLES OR FULL FACE SHIELD.
RUBBER GLOVES.

ADDITIONAL PROTECTIVE MEASURES:
USE LOCAL EXHAUST VENTILATION.

-----SPECIAL PRECAUTIONS-----

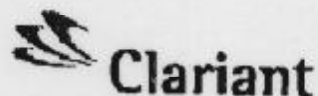
STORE IN A COOL PLACE.
KEEP TIGHTLY SEALED.
KEEP AWAY FROM SOURCES OF HEAT AND IGNITION.

-----OTHER REGULATORY CONTROLS-----

OTHER REGULATORY CONTROLS:
THE COMPONENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY.
THE INGREDIENTS OF THIS PRODUCT ARE KNOWN TO BE BIODEGRADABLE.
A SIMILAR PRODUCT IS NON-TOXIC TO FATHEAD MINNOW AT 1.017 GRAMS PER LITER.

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-----OTHER REGULATORY CONTROLS----- (CONTINUED)

THIS PRODUCT CONTAINS THE CHEMICAL OR CHEMICALS LISTED BELOW,
WHICH ARE SUBJECT TO THE SUPPLIER NOTIFICATION REQUIREMENTS OF
SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF
1986 ("SARA") AND THE REQUIREMENTS OF 40 CFR PART 372.

N-METHYLPYRROLIDONE CAS# 872-50-4 72X

OSHA HEALTH HAZARDS:
BLOOD TOXIN
EYE HAZARD
IRRITANT
NERVE SYSTEM TOXIN
REPRODUCTIVE TOXIN
SKIN HAZARD

SARA HAZARD CLASS:
ACUTE: YES CHRONIC: YES FIRE HAZARD: NO PRESSURE: NO REACTIVITY: NO