



SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER/SUPPLIER NAME: Clariant Corporation, AZ Electronic Materials
 PO Box 3700, 70 Meister Avenue
 Somerville, NJ 08876-1258

TELEPHONE NUMBERS: Emergency-CHEMTREC: (800) 424-9300
 Product Safety Information: (908) 429-3593
 Customer Service: (800) 515-4164

PRODUCT NAME: AZ(R) 7905 MIF PHOTORESIST
SYNONYMS: None

MSDS NO. 702S
REVISION DATE: 01/03/2000
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SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name & CAS Number</u>	<u>Weight Percent</u>	<u>Hazardous?</u>	<u>NJ Trade Secret #</u>	<u>Ingredient Synonyms</u>	<u>Other Information:</u>
Ethyl lactate 000097-64-3	71	Yes	NA	Ethyl 2-hydroxypropionate	PA RTK list.
n-Butyl acetate 000123-88-4	13	Yes	NA	NBA	PA RTK List.

<u>Chemical Name & CAS Number</u>	<u>Weight Percent</u>	<u>Hazardous?</u>	<u>NJ Trade Secret #</u>	<u>Ingredient Synonyms</u>	<u>Other Information:</u>
Trade Secret : Cresol novolak resin	<15	No	67829000004-5540P	None	Trade secret per NJ/PA RTK laws.
Trade Secret : Diazonaphthoquinonesulfonic esters	<5	Yes	67829000004-5522P	None	Trade secret per NJ/PA RTK laws.
Trade Secret : Phenolic polyol	<5	No	67829000004-5547P	None	Trade secret per NJ/PA RTK laws.
Trade Secret : Diazonaphthoquinonesulfonic esters	<5	No	67829000004-5546P	None	Trade secret per NJ/PA RTK laws.

SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Amber-red liquid with characteristic odor. Partially dissolves in water leaving a floating viscous mass. OSHA combustible liquid; DOT flammable liquid. Irritating on contact or inhalation.

POTENTIAL HEALTH EFFECTS:

Eye:

Causes eye irritation.

Skin:

Causes skin irritation.

Ingestion:

May be harmful if swallowed.

Inhalation:

Causes irritation to mucous membranes.

Systemic Effects:

No information.

Reproductive & birth defects:

No information.

Relevant Routes of Exposure:

Inhalation. Skin absorption. Eye contact with liquid and vapors.

Medical Conditions Aggravated:

Preexisting skin, eye, and respiratory conditions may be aggravated.

Ethyl lactate is a skin, eye, and mucous membrane irritant.

N-butyl acetate is a skin and eye irritant. Inhalation of vapors at high concentrations can cause irritation of eyes and respiratory tract and narcosis. Systemic effects have not been conclusively shown. Animal test have shown that an aerosol of n-butyl acetate, but not its vapor, is highly toxic. Special care must be taken to avoid generation of or exposure to aerosols or mists of n-butyl acetate.

ENVIRONMENTAL OVERVIEW:

Not all components tested, major component has little or no environmental hazard.

SECTION 4. FIRST AID MEASURES

FIRST AID PROCEDURES:

Inhalation:

Remove 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. Flush affected area thoroughly with water. After flushing with water, remove residue with soap and water. If necessary, clean area with a cloth or paper towel wetted with acetone. Assure adequate ventilation. Dispose of cloth/towel in a suitable receptacle. Wash area again with soap and water. Consult physician if exposure is extensive or if irritation occurs.

Ingestion:

If person is conscious, give water or milk to dilute stomach contents. Never give anything by mouth to an unconscious person. Consult physician.

NOTE TO PHYSICIANS:

Administer oxygen if there is difficulty in breathing.

SECTION 5. FIRE FIGHTING MEASURES

Flash point:

106 deg F. Closed Cup

Extinguishing Media:

Carbon dioxide, water, alcohol foam, 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 fumes under fire conditions.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures:

Wearing appropriate personal protective equipment, contain spill, ventilate area of spill or leak, remove all sparking devices or ignition sources, collect onto inert absorbent, and place in a suitable container.

SECTION 7. HANDLING AND STORAGE

Handling:

Keep away from heat and flame. Wash thoroughly after handling. Keep container closed. Avoid breathing vapors and contact with skin, eyes, and clothing. Use only with adequate ventilation and proper protective eyewear, gloves, and clothing.

Storage:

Store at appropriate temperature. See label for details. Store in original container. Transport and store under dry conditions tightly closed and protected from heat and light. Pressure may build up slowly in closed containers due to gradual decomposition. This is accelerated by heat and light. May liberate combustible solvent vapors.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Use local exhaust ventilation.

Personal Protective Equipment (PPE):

Clothing suitable to prevent skin contact. Rubber gloves. Chemical cartridge respirator recommended for exposures exceeding TLV. Safety eyewear to protect against splashes.

Exposure Guidelines:

<u>Chemical Name & CAS Number</u>	<u>Weight Percent</u>	<u>Manufacturer's TWA TLV*</u>	<u>ACGIH TWA TLV*</u>	<u>OSHA PEL*</u>	<u>NIOSH REL*</u>	<u>AIHA WEEL*</u>
Ethyl lactate 000097-84-3	71	250 ppm				
n-Butyl acetate 000123-60-4	13		150 ppm (713 mg/m3)	150 ppm (710 mg/m3)	150 ppm (710 mg/m3)	

<u>Chemical Name & CAS Number</u>	<u>Weight Percent</u>	<u>Manufacturer's TWA TLV*</u>	<u>ACGIH TWA TLV*</u>	<u>OSHA PEL*</u>	<u>NIOSH REL*</u>	<u>AIHA WEEL*</u>
Trade Secret : Cresol novolak resin	<15					
Trade Secret : Diazonaphthoquinonesulfonic esters	<5					
Trade Secret : Phenolic polyol	<5					
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*TWA TLV = Time Weighted Average Threshold Limit Value

ACGIH = American Conference of Governmental Industrial Hygienists

OSHA PEL = Occupational Safety and Health Administration Permissible Exposure Limit

NIOSH REL = National Institute of Occupational Safety and Health Recommended Exposure Limit

AIHA WEEL = American Industrial Hygiene Association Workplace Environmental Exposure Level

**Skin Notation

***Hoechst Celanese Workplace Exposure Level (HCC WEL); included is a "no contact" recommendation for NMP due to its skin absorption properties.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear amber-red liquid.
Odor:	Strong, characteristic odor.
Physical State:	Liquid with dissolved solids.
Vapor Pressure	2.44 torr (calculated)
Boiling Point:	Begins 155 C
Solubility in water:	The solvent is partially water soluble but the product forms two layers.
Specific gravity:	0.990
VOC:	832 g/L
Evaporation rate (butyl acetate=1):	< Ether
% Volatile:	84%

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability:

Stable.

Hazardous Polymerization:

Will not occur.

Conditions to Avoid:

Avoid contact with oxidizing agents. Avoid contact with strong acids. Avoid contact with alkaline materials.

Hazardous Decomposition Products:

Thermal decomposition may generate carbon dioxide, carbon monoxide, and oxides of nitrogen and sulfur.

SECTION 11. TOXICOLOGICAL INFORMATION

Carcinogen:

IARC: NO NTP: NO OSHA: NO

Ingredient Toxicity Data:

<u>Chemical Name & CAS</u>	<u>Weight Percent</u>	<u>oral rat LD50</u>	<u>skin rbt LD50</u>	<u>inh rat LC50</u>
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<u>Number</u>				
Ethyl lactate 000097-64-3	71	>5000 mg/kg	>5000 mg/kg	>5400 mg/cum/8hr
n-Butyl acetate 000123-86-4	13	14 g/kg		

<u>Chemical Name & CAS Number</u>	<u>Weight Percent</u>	<u>oral rat LD50</u>	<u>skin rbt LD50</u>	<u>inh rat LC50</u>
Trade Secret : Cresol novolak resin	<15			
Trade Secret : Diazonaphthoquinonesulfonic esters	<5			
Trade Secret : Phenolic polyol	<5			
Trade Secret : Diazonaphthoquinonesulfonic esters	<5			

TOXICITY HAZARD STATEMENTS FOR PRODUCT:

SECTION 12. ECOLOGICAL INFORMATION

Ingredient Ecological Toxicity Data:

<u>Chemical Name & CAS Number</u>	<u>Weight Percent</u>	<u>Fish LC50</u>	<u>Daphnia EC50</u>	<u>Algae IC50</u>
Ethyl lactate 000097-64-3	71	320 mg/L	680 mg/L	2200 mg/L
n-Butyl acetate 000123-86-4	13			

<u>Chemical Name & CAS Number</u>	<u>Weight Percent</u>	<u>Fish LC50</u>	<u>Daphnia EC50</u>	<u>Algae IC50</u>
Trade Secret : Cresol novolak resin	<15			
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Trade Secret : Phenolic polyol	<5			
Trade Secret : Diazonaphthoquinonesulfonic esters	<5			

Environmental hazard information statements (using EU classification criteria):

Environmental Fate:
No information.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal:
Consult local, state, and federal regulations. For disposal, this material is a flammable hazardous waste under RCRA.

SECTION 14. TRANSPORT INFORMATION

DOT/IATA Shipper Entry:
Flammable liquid, n.o.s. (ethyl lactate,n-butyl acetate), 3, UN1993, III.

Other Information:
Not regulated for surface transportation in non-bulk containers under 119 gallons.

SECTION 15. REGULATORY INFORMATION

TSCA Inventory Status:
One or more components of this product are not listed on the TSCA Inventory. The components, however, are covered by Low Volume Exemptions.

SARA Title III section 313:
This product is not subject to SARA Title III Section 313 reporting requirements under 40CFR372.

OSHA Physical Hazards:
Combustible liquid.

OSHA Health Hazards:
Eye Hazard. Irritant. Skin Hazard. Lung Toxin.

SARA (311, 312) Hazard Class(es):
Acute health hazard. Fire hazard.

SECTION 16. OTHER INFORMATION

HMIS Ratings:
Health = 2; Flammability = 2; Reactivity = 0; PPE=G

NFPA Ratings:
Health = 2; Flammability = 2; Reactivity = 0; Special Hazard = None.

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