



MATERIAL SAFETY DATA SHEET



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) R2 DEVELOPER
SYNONYMS: None

MSDS NO. 704J
REVISION DATE: 10/15/1999
DATE PRINTED: 04/03/2000

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>
2-Propanol 000067-63-0	10	Yes	NA	Isopropanol IPA	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>
Water 007732-18-5	>85	No	NA	None	NJ/PA RTK listings. Not on any other state RTK list.

SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Clear, colorless liquid. Alcohol odor. Water soluble. Irritating on contact or inhalation. May produce systemic or organ effects with repeated or excessive exposure. Evolves flammable vapors but does not continue to burn below 88 degrees C.

POTENTIAL HEALTH EFFECTS:

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.

This product contains **2-propanol**. 2-propanol is an eye and respiratory irritant. It may cause skin irritation. It is absorbed through the skin. Repeated and prolonged exposure can affect the liver and can cause permanent brain and nerve damage. 2-propanol has caused harm to the fetus in animal studies.

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 and wash affected area thoroughly 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:

96 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. Evolves flammable vapors but does not continue to burn below 88 degrees C.

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:

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. Keep away from heat, sparks, and flame.

Storage:

Store at appropriate temperature. See label for details. Store in original container. Transport and store under dry conditions tightly closed. May liberate flammable 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>
2-Propanol 000067-63-0	1.0		250 ppm (1040 mg/m3)	400 ppm (980 mg/m3)	400 ppm (980 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>
Water 007732-18-5	>85					

*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

***Hochst 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, colorless liquid.
Odor:	Alcohol odor.
Physical State:	Liquid
Boiling Point:	Starts at approximately 82 deg C
Solubility in water:	Soluble.
Specific gravity:	1.000
Evaporation rate (butyl acetate=1):	< Ether
% Volatile:	100%

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.

Hazardous Decomposition Products:

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

SECTION 11. TOXICOLOGICAL INFORMATION

Carcinogen:

IARC: NO NTP: NO OSHA: NO

Ingredient Toxicity Data:

<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>
2-Propanol 000067-63-0	1.0	5045 mg/kg	12.8 g/kg	16,000 ppm

<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>
Water 007732-18-5	>85			

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>
2-Propanol 000067-63-0	1.0			

<u>Chemical Name & CAS Number</u>	<u>Weight Percent</u>	<u>Fish LC50</u>	<u>Daphnia EC50</u>	<u>Algae IC50</u>
Water	>85			

007732-1B-5

Environmental hazard information statements (using EU classification criteria):

Environmental Fate:
No information.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal:
Consult local, state, and federal regulations.

SECTION 14. TRANSPORT INFORMATION

DOT/IATA Shipper Entry:
This product is not regulated for surface or air transportation. Evolves flammable vapors but does not continue to burn below 88 degrees C.

SECTION 15. REGULATORY INFORMATION

TSCA Inventory Status:
All components of this product are listed on the TSCA Inventory.

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

OSHA Health Hazards:
Eye Hazard. Irritant. Nervous System Toxin. Skin Hazard. Lung Toxin. Liver Toxin. Reproductive Toxin.

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

SECTION 16. OTHER INFORMATION

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

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

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