

## 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) 400K DEVELOPER

**SYNONYMS:** None

**MSDS NO.** 7070

**REVISION DATE:** 11/19/1999

**DATE PRINTED:** 02/14/2001

## SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name &amp; CAS Number</u>	<u>Weight Percent</u>	<u>Hazardous?</u>	<u>NJ Trade Secret #</u>	<u>Ingredient Synonyms</u>	<u>Other Information:</u>
Water	>85	No	NA	None	NJ/PA RTK listings. Not on any other state RTK list.
007732-18-5					
Potassium borates	<15	No	NA	None	NJ/PA RTK listings. Not on any other state RTK list.
020786-60-1					

## SECTION 3. HAZARDS IDENTIFICATION

### **EMERGENCY OVERVIEW:**

Clear, colorless liquid. Noncombustible. Water soluble. No odor. Causes severe eye irritation.

### **POTENTIAL HEALTH EFFECTS:**

#### **Eye:**

Causes severe eye irritation

#### **Skin:**

No hazard in normal industrial use.

#### **Ingestion:**

No hazard in normal industrial use.

#### **Inhalation:**

No hazard in normal industrial use.

#### **Systemic Effects:**

Repeated high-level exposure causes kidney damage.

#### **Reproductive & birth defects:**

Exposures having no adverse effect on the mother should have no effect on the fetus. Overexposure of males to borates causes damage to the testes and reduced sperm production.

#### **Relevant Routes of Exposure:**

Liquid and mist contact with skin and eyes. Inhalation of mist.

#### **Medical Conditions Aggravated:**

Preexisting skin and eye conditions may be aggravated.

### **ENVIRONMENTAL OVERVIEW:**

No or very low 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 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. Do not induce vomiting. Consult physician.

## SECTION 5. FIRE FIGHTING MEASURES

Noncombustible. Water-based material containing no combustible components. Compatible with extinguishing agents.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Spill or Leak Procedures:

Wearing appropriate personal protective equipment, contain spill, collect onto inert absorbent, and place in a suitable container. Rinse residual with water.

## SECTION 7. HANDLING AND STORAGE

### Handling:

Avoid contact with skin, eyes, and clothing.

### Storage:

Store in original container. Store at appropriate temperature. See label for details. Keep from freezing.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Controls:

Where mist is present, provide local exhaust ventilation or a respirator certified for mist by NIOSH.

### Personal Protective Equipment (PPE):

Clothing suitable to prevent skin contact. Safety goggles or full face shield to protect against splashes. Rubber gloves.

### Exposure Guidelines:

<u>Chemical Name &amp; 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	>85					
007732-18-5 Potassium borates	<15					
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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 liquid.

**Odor:** No odor.

**Physical State:** Liquid with dissolved solids.

**pH** 12.9

**Vapor Pressure** About the same as water.

**Boiling Point:** 100 deg C

**Solubility in water:** Soluble.

**Specific gravity:** 1.09

**VOC:** 0

**Evaporation rate**

**(butyl acetate=1):** About the same as water.

**Viscosity:** Similar to water.

**% Volatile:** 88%

## **SECTION 10. STABILITY AND REACTIVITY**

**Chemical Stability:**

Stable.

**Hazardous Polymerization:**

Will not occur.

**Conditions to Avoid:**

Avoid contact with strong acids. This product is expected, by test or analogy, to slowly attack aluminum and perhaps other nonferrous metals, releasing hydrogen gas.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

**Carcinogen:**

IARC: NO NTP: NO OSHA: NO

### **Ingredient Toxicity Data:**

<u>Chemical Name &amp; CAS Number</u>	<u>Weight Percent</u>	<u>oral rat LD50</u>	<u>skin rbt LD50</u>	<u>inh rat LC50</u>
Water	>85			
007732-18-5				
Potassium borates	<15			
020786-60-1				

**TOXICITY HAZARD STATEMENTS FOR PRODUCT:**

**Eye Effects:**

Testing in rabbits shows that the material is a severe eye irritant.

**Skin Effects:**

Testing in animals shows that this material is a non-irritant. D.O.T. four hour rabbit skin test of this product was negative for skin corrosion.

**Acute Oral Effects:**

No data.

**Subchronic Effects:**

Repeated exposure to boric acid or its salts has been associated with gastrointestinal effects, kidney damage, skin eruptions, testicular atrophy, and reduced sperm production..

**Chronic Effects:**

Chronic exposure may result in accumulation of borates in the body, gastrointestinal disturbances, kidney damage, skin eruptions, testicular atrophy and aspermia.

**Mutagenicity/Genotoxicity:**

Testing of components suggest no genotoxic hazard.

## **SECTION 12. ECOLOGICAL INFORMATION**

### **Ingredient Ecological Toxicity Data:**

<u>Chemical Name &amp; CAS Number</u>	<u>Weight Percent</u>	<u>Fish LC50</u>	<u>Daphnia EC50</u>	<u>Algae IC50</u>
Water	>85			
007732-18-5				
Potassium borates	<15			
020786-60-1				

**Environmental hazard information statements (using EU classification criteria):**

**Toxicity to fish:**

Based on data from components, this material is classified as: Not Harmful (LC50 >100 mg/L).

**Toxicity to daphnids:**

Based on data from components, this material is classified as: Not Harmful (EC50 greater than 100 mg/L).

**Environmental Fate:**

Based on data from components, this material is considered resistant to biodegradation.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal:**

Consult local, state, and federal regulations. This product would be considered a hazardous waste under RCRA due to high pH unless neutralized prior to disposal.

**SECTION 14. TRANSPORT INFORMATION**

**DOT/IATA Shipper Entry:**

Caustic alkali liquid, n.o.s. (potassium borates), 8, UN1719, III.

**Other Information:**

Classification due to corrosivity of aluminum.

**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 Physical Hazards:**

None

**OSHA Health Hazards:**

Irritant. Eye Hazard. Skin Hazard.

**SARA (311, 312) Hazard Class(es):**

Acute health hazard.

**SECTION 16. OTHER INFORMATION**

**HMIS Ratings:**

Health = 2; Flammability = 0; Reactivity = 0; PPE=X

**NFPA Ratings:**

Health = 2; Flammability = 0; Reactivity = 0; Special Hazard = None.

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