## MATERIAL SAFETY DATA SHEET

### SECTION I  MATERIAL INFORMATION

**PRODUCT NAME:** PF-95  
**TRADE NAME:** PF-95 Photomask Fixer  
**AND SYNONYMS**  
**CAS NUMBER:** N/A  
**CHEMICAL FAMILY:** Acid Solution  
**FORMULA:** (NH4)2S2O3+CH3COOH+Na2S03+HB03  
**MANUFACTURER:** CYANTEK CORPORATION  
3055 OSGOOD COURT  
FREMONT, CA 94538  
(510) 651-3341  

**24 HOUR EMERGENCY RESPONSE**  
CHEMTREC  
800 424-9300  

**NFPA RATING**  
- **HEALTH:** 2  
- **FIRE:** 0  
- **REACTIVITY:** 0  

0=LEAST, 1=SLIGHT, 2=Moderate, 3=SERIOUS, 4=SEVERE

### SECTION II  HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>%</th>
<th>TLV</th>
<th>CAS NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Thiosulfate</td>
<td>8%</td>
<td>25 ppm</td>
<td>7783-18-8</td>
</tr>
<tr>
<td>(for ammonia)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetic Acid</td>
<td>&lt;1%</td>
<td>10 ppm</td>
<td>64-19-7</td>
</tr>
<tr>
<td>Sodium Sulfite</td>
<td>&lt;1%</td>
<td>None</td>
<td>7757-83-7</td>
</tr>
<tr>
<td>Boric Acid</td>
<td>&lt;1%</td>
<td>None</td>
<td>10043-35-3</td>
</tr>
</tbody>
</table>

### SECTION III  PHYSICAL DATA

- **MOLECULAR WEIGHT:** N/A  
- **SOLUBILITY IN WATER:** Complete  
- **BOILING POINT (°F):** >212  
- **SPECIFIC GRAVITY (g/ml):** 1.07  
- **FREEZING POINT (°F):** Approx. 32  
- **APPEARANCE & COLOR:** Colorless, light yellow liquid  
- **VAPOR PRESSURE (mm Hg):** N/A  
- **ODOR:** Mixture of sulfur & vinegar odor  
- **VAPOR DENSITY (Air =1):** N/A  
- **PERCENT VOLATILES (by vol):** N/A  

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SECTION IV   FIRE AND EXPLOSION AND HAZARD DATA

FLASH POINT (°F): N/A  (TAG CLOSED CUP)

EXPLOSION LIMIT (% by vol.): N/A  LOWER: UPGER:

EXTINGUISHING MEDIA:
This material is not combustible and is compatible with any extinguishing media.

SPECIAL FIREFIGHTING PROCEDURES:
Prevent the boiling of this formulation. This formulation is a non-flammable aqueous solution.

FIREFIGHTERS SHOULD WEAR:
Wear goggles.
Wear protective clothing to avoid skin contact.
Wear respirators.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
No explosion hazard.
Material is not combustible, but is hazardous if concentrated by evaporation.
When heated to decomposition, emits smoke and irritating fumes.
Substance can react with oxidizing agents.

SECTION V   HEALTH HAZARD INFORMATION

LISTED AS CARCINOGEN:
Not listed as carcinogen.

EFFECTS OF OVEREXPOSURE:
Irritation to eyes, nose, and throat
Prolonged contact with skin may cause excessive irritation.

FIRST AID PROCEDURES:

EYE CONTACT:
Flush with water at least 15 minutes.
Get medical care.

SKIN CONTACT:
Flush affected areas with plenty of water.
Get medical care.

INHALATION:
Move to fresh air.
Get medical attention if breathing is difficult.

INGESTION:
Give large amounts of water.
Get medical attention.
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SECTION VI REACTIVITY DATA

STABILITY:
Stable.

INCOMPATIBILITY:
Incompatible with strong oxidizers.
Reacts with caustics but a violent reaction is not expected.
Incompatible with water reactive substances.

HAZARDOUS DECOMPOSITION PRODUCTS:
Releases toxic gases when heated.

HAZARDOUS POLYMERIZATION:
No hazardous polymerization expected.

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN:
Contain the spill by diking or absorbing the liquid.
For small quantities, absorb on paper towels.
Avoid skin contact with substance.

WASTE DISPOSAL:
Dispose in approved disposal site following federal, state, local regulations.
It does not contain heavy metals.
Empty containers could be disposed in regular disposal site after triple rinse.

SECTION VIII SPECIAL PROTECTION

Use gloves, face shield to prevent skin contact.
Use protective clothing of rubber or similar nonpermeable material.

VENTILATION:
Provide general ventilation to meet TLV requirements in workplace.
No special requirements.

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SECTION IX  SPECIAL PRECAUTIONS

No special precautions to be taken.

SECTION X  REGULATORY INFORMATION

SARA/TITLE III DATA  (For Ingredients)

CERCLA HAZARDOUS SUBSTANCES: Acetic Acid (RQ 5000#), Ammonium Thiosulfate (RQ 5000#)

(WITH REPORTABLE QUANTITIES)

EXTREMELY HAZARDOUS SUBSTANCES: None

TOXIC CHEMICALS (SECTION 313): None

DOT INFORMATION

HAZARD CLASS: Not Regulated

PROPER SHIPPING NAME: N/A

UN/NA NUMBER: N/A

TSCA INVENTORY  (For Ingredients)

TSCA INVENTORY: All ingredients on TSCA inventory.

PROPOSITION 65 STATUS  (For Ingredients)

PROP. 65 LIST: No ingredients on Prop. 65 list.

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