



Health	2
Flammability	0
Reactivity	0
Personal Protection	B

Trebla  
 8417 Chapin Industrial Drive  
 St. Louis, MO 63114  
 Phone 1-800-325-4404

March 09, 1998

## MATERIAL SAFETY DATA SHEET

### SECTION I - General Information

**Product Name:** TriPhase RA Developer Replenisher

**Catalog Number:** 30DE380, 30DE381

**Formula:** Aqueous Solution

### SECTION II - Product and \*Hazardous Ingredients Information

<u>Concentrate</u>	<u>CAS #</u>	<u>PERCENT</u>	<u>PEL</u>	<u>SARA</u> <u>RQ / TQP</u>	
4-(N-Ethyl-N-2-Methane Sulfonylamino Ethyl)-2-Phenylene Diamine (CD-3)	25646-71-3	5-10	N/A	N/A	N/A
Diethylhydroxylamine	3710-84-7	1-5	N/A	N/A	N/A
Potassium Carbonate	584-08-7	15-20	N/A	N/A	N/A
* Potassium Hydroxide	1310-58-3	1-5	N/A	N/A	N/A
Poly (maleic acid)	N/A	1-5	N/A	N/A	N/A
Proprietary	N/A	5-10	5 ppm	N/A	N/A
Water	7732-18-5	55	N/A	N/A	N/A

### Working Solution

4-(N-Ethyl-N-2-Methane Sulfonylamino Ethyl)-2-Phenylene Diamine (CD-3)	25646-71-3	<1	N/A	N/A	N/A
Diethylhydroxylamine	3710-84-7	<1	N/A	N/A	N/A
Potassium Carbonate	584-08-7	1-5	N/A	N/A	N/A
* Potassium Hydroxide	1310-58-3	<1	N/A	N/A	N/A
Poly (maleic acid)	N/A	<1	N/A	N/A	N/A
Proprietary	N/A	<1	5 ppm	N/A	N/A
Water	7732-18-5	95-100	N/A	N/A	N/A

### SECTION III - Physical Data

#### Concentrate

BOILING POINT: >212° F  
 VAPOR DENSITY(mmHg): ~0.60  
 SPECIFIC GRAVITY: N/A  
 EVAPORATION RATE: N/A  
 APPEARANCE AND ODOR: Light yellow when not stratified, amine odor.

VAPOR PRESSURE (mmHg): ~18  
 SOLUBILITY IN WATER: Complete  
 pH: N/A  
 PERCENT VOLATILE BY WEIGHT: ~ 55 %

#### Working Solution

BOILING POINT: >212° F  
 VAPOR DENSITY(mmHg): ~0.60  
 SPECIFIC GRAVITY: 1.028  
 EVAPORATION RATE: N/A  
 APPEARANCE AND ODOR: Light yellow, amine odor.

VAPOR PRESSURE (mmHg): ~18  
 SOLUBILITY IN WATER: Complete  
 pH: 10.70  
 PERCENT VOLATILE BY WEIGHT: ~ 99 %

### SECTION IV - Fire and Explosion Hazard Data

**Flash Point:** None      **Flammable Limits: LEL:** None    **UEL:** None

**Extinguishing Media:** Use water spray, dry chemical, CO<sub>2</sub>, foam.

**Special Fire Fighting Procedures:** Use self contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Unusual Fire and Explosions Hazards:** Fire or excessive heat may cause hazardous decomposition products.

## **SECTION V - Health Hazard Data**

### **Effects of Overexposure:**

**Inhalation:** Expected to be a low hazard under normal conditions. Use adequate ventilation.

**Eyes:** Vapor may cause transient irritation. Contact may cause severe burns.

**Skin:** Repeated and prolonged contact may cause irritation and possible allergic skin reaction.

**Ingestion:** Do not take internally. Harmful if swallowed. May cause severe burns to upper digestive tract.

### **Emergency First Aid Procedures:**

**Inhalation:** Move to fresh air.

**Eyes:** Flush with large amounts of water for 15 minutes. Seek medical attention.

**Skin:** Wash skin with soap and water. If irritation occurs, seek medical attention.

**Ingestion:** Drink 1-2 glasses of water. **Do Not** induce vomiting. Seek medical attention immediately giving full details of amount ingested and toxicity.

**TLV (ACGIH):** Potassium Hydroxide, 2 mg/m<sup>3</sup>. SO<sub>2</sub> gas (if released), 2 ppm. Proprietary ingredient (vapor), 4.3 ppm.

**Carcinogenicity:** N/A • **Teratogenicity:** N/A • **Reproductive Toxicity:** N/A • **Mutagenicity:** N/A • **Synergistic Products:** N/A

## **SECTION VI - Reactivity Data**

**Stability:** Stable.

**Incompatibility:** Strong oxidizers and strong acids.

**Hazardous Decomposition Products:** Combustion will produce carbon monoxide and carbon dioxide. Oxides of nitrogen and sulfur dioxide may also be produced.

**Hazardous Polymerization:** Will not occur.

**Conditions to Avoid:** Keep container closed. Keep away from strong oxidizers and strong acids.

## **SECTION VII - Spill or Leak Procedure**

**Steps to be Taken in Case Material is Released or Spilled:** Wear protective clothing as specified in Section VIII. If federal, state and local laws permit, flush to the sewer with large amounts of water.

**Waste Disposal:** If federal, state and/or local laws permit, flush to sewer with large amounts of water. Otherwise dispose of contaminated product and materials used in cleaning up the spill in a manner approved for this material. Consult proper federal, state and/or local regulatory agencies to ascertain proper disposal procedures.

## **SECTION VIII - Special Protection Information**

**Respiratory Protection (Specify Type):** Should not be necessary under normal conditions.

**Ventilation:** Good local mechanical ventilation should be sufficient.

### **Protective Equipment:**

**Gloves:** Impervious gloves.

**Eyes:** Wear protective goggles.

**Other:** As necessary to prevent skin contact. Eyewash facilities in vicinity of use. The routine use of a non-alkaline type hand cleaner will minimize the possibility of an allergic skin reaction.



November 6, 1998

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Trebla  
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## MATERIAL SAFETY DATA SHEET

### SECTION I - General Information

**Product Name:** ColorPAC RA Bleach-fix, Part A

**Catalog Number:** 35RA350

**Formula:** Aqueous Solution

### SECTION II - Product and \*Hazardous Ingredients Information

<u>ITEM</u>	<u>CAS #</u>	<u>PERCENT</u>	<u>PEL</u>	<u>SARA</u>	
				<u>RQ</u>	<u>TPQ</u>
Ammonium Thiosulfate	7783-18-8	35-40	N/A	N/A	N/A
* Sodium Metabisulfite	7681-57-4	10-15	5mg/m <sup>3</sup> (TWA)	N/A	N/A
Water	7732-18-5	N/A	N/A	N/A	N/A

### SECTION III - Physical Data

**BOILING POINT:** >212° F

**VAPOR DENSITY (mmHg):** ~0.6

**SPECIFIC GRAVITY:** ~ 1.20

**EVAPORATION RATE:** N/A

**APPEARANCE AND ODOR:** Clear light yellow color, slight sulfur dioxide odor.

**VAPOR PRESSURE (mmHg):** ~17

**SOLUBILITY IN WATER:** Complete

**pH:** ~ 5.5

**PERCENT VOLATILE BY WEIGHT:** ~75 %

### SECTION IV - Fire and Explosion Hazard Data

**Flash Point:** None

**Flammable Limits: LEL:** NA **UEL:** NA

**Extinguishing Media:** Use method appropriate for surrounding fire.

**Special Fire Fighting Procedures:** Use self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Unusual Fire and Explosions Hazards:** When heated to decomposition, it can emit toxic fumes of ammonia and SO<sub>x</sub>.

### SECTION V - Health Hazard Data

**TLV (ACGIH):** Sodium Metabisulfite, 5mg/m<sup>3</sup> (TWA). Acetic Acid, 25mg/m<sup>3</sup> (TWA).

#### **Effects of Overexposure:**

**Inhalation:** Expected to be a low hazard under normal conditions.

**Eyes:** May cause irritation.

**Skin:** Repeated and prolonged contact may cause irritation.

**Ingestion:** Do not take internally. Expected to be a low hazard. May cause Nausea.

**Carcinogenicity:** N/A • **Teratogenicity:** N/A • **Reproductive Toxicity:** N/A • **Mutagenicity:** NA • **Synergistic Products:** N/A

**Emergency First Aid Procedures:**

**Eyes:** Flush with large amounts of water for 15 minutes. Seek medical attention.

**Skin:** Wash skin with soap and water. If irritation occurs, seek medical attention.

**Ingestion:** If conscious, have victim drink water or milk. Induce vomiting. Seek medical attention immediately, giving full details of amount ingested and toxicity.

**Inhalation:** Move to fresh air.

**SECTION VI - Reactivity Data**

**Stability:** Stable.

**Incompatibility:** Strong acids, strong alkalis.

**Hazardous Decomposition Products:** When heated to decomposition, it can emit toxic fumes of ammonia and SO<sub>x</sub>. Contact with strong acids will release SO<sub>2</sub> and contact with strong alkalis will release ammonia.

**Hazardous Polymerization:** Will not occur.

**Conditions to Avoid:** Do not store near strong acids or strong alkalis.

**SECTION VII - Spill or Leak Procedure**

**Steps to be taken in case material is released or spilled:** Wear protective clothing as specified in Section VIII. If federal, state and local laws permit, flush to the sewer with large amounts of water.

**Waste Disposal:** If federal, state and/or local laws permit, flush to sewer with large amounts of water. Otherwise dispose of contaminated product and materials used in cleaning up the spill in a manner approved for this material. Consult proper federal, state and/or local regulatory agencies to ascertain proper disposal procedures.

**SECTION VIII - Special Protection Information**

**Respiratory Protection (Specify Type):** Should not be necessary under normal conditions.

**Ventilation:** Good local mechanical ventilation should be sufficient.

**Protective Equipment:**

**Gloves:** Impervious gloves.

**Eyes:** Wear protective goggles.

**Other:** As necessary to prevent skin contact. Eyewash facilities in vicinity of use.

**SECTION IX - Special Precautions**

**Precautions to be taken in handling and storage:** Do not store near strong acids or strong alkalis. Wash thoroughly after use. Do not consume food, drink or tobacco in vicinity of use.

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November 6, 1998

Health	1
Flammability	0
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Personal Protection	B

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## MATERIAL SAFETY DATA SHEET

### SECTION I - General Information

**Product Name:** ColorPAC RA Bleach-fix, Part B

**Catalog Number:** 35RA350

**Formula:** Aqueous Solution

### SECTION II - Product and \*Hazardous Ingredients Information

ITEM	CAS #	PERCENT	PEL	SARA	
				RQ	TPQ
Ferric Ammonia EDTA	021265-50-9	25-30	N/A	N/A	N/A
* Acetic Acid	64-19-7	1-5	10 ppm (TWA)	N/A	N/A
Water	7732-18-5	N/A	N/A	N/A	N/A

### SECTION III - Physical Data

**BOILING POINT:** >212° F

**VAPOR DENSITY (mmHg):** ~0.6

**SPECIFIC GRAVITY:** 1.10

**EVAPORATION RATE:** N/A

**APPEARANCE AND ODOR:** Red brown, Ammonia odor.

**VAPOR PRESSURE (mmHg):** ~ 17.0

**SOLUBILITY IN WATER:** Complete

**pH:** ~ 5.55

**PERCENT VOLATILE BY WEIGHT:** ~ 75 %

### SECTION IV - Fire and Explosion Hazard Data

**Flash Point:** None      **Flammable Limits: LEL:** N/A    **UEL:** N/A

**Extinguishing Media:** Water spray, alcohol resistant foam, CO<sub>2</sub>, dry chemical.

**Special Fire Fighting Procedures:** Use self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Unusual Fire and Explosions Hazards:** Fire sufficient to evaporate water may cause oxides of nitrogen to be formed during combustion.

### SECTION V - Health Hazard Data

**TLV (ACGIH):** Acetic Acid, 10 ppm (TWA).

#### **Effects of Overexposure:**

**Inhalation:** Expected to be a low hazard under normal conditions.

**Eyes:** Vapors may cause slight irritation. Contact causes irritation.

**Skin:** Prolonged or repeated contact may result in irritation.

**Ingestion:** Expected to be a low hazard. May cause nausea.

**Carcinogenicity:** N/A • **Teratogenicity:** N/A • **Reproductive Toxicity:** N/A • **Mutagenicity:** N/A • **Synergistic Products:** N/A

**Emergency First Aid Procedures:**

**Eyes:** Flush with water for 15 minutes. Seek medical attention.

**Skin:** Flush with water. If irritation occurs, call physician.

**Ingestion:** Drink water or milk. Induce vomiting and seek medical attention.

**Inhalation:** Move to fresh air.

**SECTION VI - Reactivity Data**

**Stability:** Avoid evaporation to dryness.

**Incompatibility:** Contact with carbon steel produces hydrogen.

**Hazardous Decomposition Products:** Material decomposes into ammonia and nitrogen oxides under fire conditions.

**Hazardous Polymerization:** Will not occur.

**Conditions to Avoid:** Do not store in temperatures above 100° F.

**SECTION VII - Spill or Leak Procedure**

**Steps to be taken in case material is released or spilled:** Wear protective clothing as specified in Section VIII. If federal, state and local laws permit, flush to the sewer with large amounts of water.

**Waste Disposal:** If federal, state and/or local laws permit, flush to sewer with large amounts of water. Otherwise dispose of contaminated product and materials used in cleaning up the spill in a manner approved for this material. Consult proper federal, state and/or local regulatory agencies to ascertain proper disposal procedures.

**SECTION VIII - Special Protection Information**

**Respiratory Protection (Specify Type):** Should not be necessary under normal conditions.

**Ventilation:** Good local mechanical ventilation should be sufficient.

**Protective Equipment:**

**Gloves:** Impervious gloves.

**Eyes:** Wear protective goggles.

**Other:** As necessary to prevent skin contact. Eyewash facility in vicinity of use.

**SECTION IX - Special Precautions**

**Precautions to be taken in handling and storage:** Do not store in temperatures above 100° F. Wash thoroughly after use. Do not consume food drink or tobacco in vicinity of use/

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Health	2
Flammability	0
Reactivity	0
Personal Protection	B

Trebla  
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Phone 1-800-325-4404

May 5, 1998

## MATERIAL SAFETY DATA SHEET

### SECTION I - General Information

**Product Name:** Trecon Print Rinse Concentrate  
**Catalog Number:** 30PR340, 30PR341, 30PR377  
**Formula:** Aqueous Solution

### SECTION II - Product and \*Hazardous Ingredients Information

<b>Concentrate</b>	<b>CAS #</b>	<b>PERCENT</b>	<b>PEL</b>	<b>SARA</b>	
				<b>RQ</b>	<b>TPQ</b>
Isothiazoline Derivative	2634-33-5	<1	N/A	N/A	N/A
Polyvinylpyrrolidone	9003-39-8	1-5	N/A	N/A	N/A
Alcohol Ethoxy Sulfate	N/A	1-5	N/A	N/A	N/A
Water	7732-18-5	90-95	N/A	N/A	N/A

### Working Solution

Isothiazoline Derivative	2634-33-5	<1	N/A	N/A	N/A
Polyvinylpyrrolidone	9003-39-8	<1	N/A	N/A	N/A
Alcohol Ethoxy Sulfate	N/A	<1	N/A	N/A	N/A
Water	7732-18-5	95-99	N/A	N/A	N/A

### SECTION III - Physical Data

**BOILING POINT:** >212° F  
**VAPOR DENSITY(mmHg):** NA  
**SPECIFIC GRAVITY:** ~ 1.02  
**EVAPORATION RATE:** Slow  
**APPEARANCE AND ODOR:** Clear, no odor.

**VAPOR PRESSURE (mmHg):** N/A  
**SOLUBILITY IN WATER:** Miscible  
**pH:** ~ 8.0  
**PERCENT VOLATILE BY WEIGHT:** ~ 96%

### SECTION IV - Fire and Explosion Hazard Data

**Flash Point:** None  
**Flammable Limits:** LEL: NA UEL: NA  
**Extinguishing Media:** Dry chemical, alcohol resistant foam, water spray/fog.  
**Special Fire Fighting Procedures:** Use self contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
**Unusual Fire and Explosions Hazards:** Toxic combustion products include sulfur dioxide, hydrogen chloride and phosgene.

### SECTION V - Health Hazard Data

**TLV (ACGIH):** Ethyl Alcohol, Denatured (15% of Alcohol Ethoxy Sulfate), 1000 ppm (TWA) Isothiazolones, 0.5 mg/m<sup>3</sup> (TWA) as mist. Human skin sensitization is induced at 25 ppm. 0.5% solutions are strongly irritating to human skin.

### Effects of Overexposure:

**Inhalation:** Fumes and mist may cause irritation of mucus membranes of nose and throat.  
**Eyes:** May cause severe irritation and cornea damage.  
**Skin:** May cause severe irritation. Repeated contact may cause skin sensitization.  
**Ingestion:** Do not take internally. Measures against circulatory shock respiratory depression and convulsions may be necessary.

**Carcinogenicity:** N/A • **Teratogenicity:** N/A • **Reproductive Toxicity:** N/A • **Mutagenicity:** NA • **Synergistic Products:** N/A

**Emergency First Aid Procedures:**

**Eyes:** Flush with large amounts of water for 15 minutes. Seek medical attention immediately.

**Skin:** Wash skin with soap and water. Seek medical attention immediately. Remove contaminated clothing, launder before reuse.

**Ingestion:** DO NOT induce vomiting. Drink large quantity of milk, egg white, gelatin solution or if unavailable, drink large quantities of water. AVOID ALCOHOL. Seek medical attention immediately. Give full details of amount swallowed and toxicity.

**Inhalation:** Move to fresh air.

**SECTION VI - Reactivity Data**

**Stability:** Stable.

**Incompatibility:** Strong oxidizing agents, strong acids.

**Hazardous Decomposition Products:** Thermal decomposition may give of CO<sub>2</sub>, CO, SO<sub>2</sub>, NO<sub>2</sub>.

**Hazardous Polymerization:** Will not occur.

**Conditions to Avoid:** To avoid evaporation to dryness in shipping container, triple rinse bottles with water, adding rinsate to mix tank. Puncture containers before disposal.

**SECTION VII - Spill or Leak Procedure**

**Steps to be Taken in Case Material is Released or Spilled:** Wear protective clothing as specified in Section VIII. Use industrial absorbent and transfer to a suitable container for disposal using authorized chemical scavenger service. Flush area with water using suitable dike as required to control runoff. Product can be neutralized in about 30 minutes using 10-12% active sodium bisulfite solution. A volume ratio of 3:1, decontaminate product is recommended.

**Waste Disposal:** Consult appropriate federal, state and local regulatory agencies for proper disposal of contaminated product and clean-up material. Waste product is an EPA hazardous waste. The degraded product is not an EPA hazardous waste.

**SECTION VIII - Special Protection Information**

**Respiratory Protection (Specify Type):** Not necessary under normal mixing procedures. An approved MESA/NIOSH respirator suitable for mist or high vapor concentrations as may be encountered in a spill.

**Ventilation:** Good local mechanical ventilation should be sufficient.

**Protective Equipment:**

**Gloves:** Impervious gloves.

**Eyes:** Wear protective goggles.

**Other:** As necessary to prevent skin contact. Eyewash facilities in vicinity of use.

**SECTION IX - Special Precautions**

**Precautions to be Taken in Handling and Storage:** Keep container closed when not in use. Store in ventilated areas. Wash thoroughly after handling. Triple rinse empty container into mix tank and dispose of bottle. Freeze point 32° F. If frozen, agitate when thawed to mix. Do not store or consume food, drink or tobacco in area.

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