



June 23, 1998

Health	2
Flammability	0
Reactivity	0
Personal Protection	B

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MATERIAL SAFETY DATA SHEET

SECTION I - General Information

Product Name: TriPhase-47 Developer Replenisher

Catalog Number: 30DE387

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	5-10	N/A	N/A	N/A
Poly (maleic acid)	N/A	1-5	N/A	N/A	N/A
Proprietary	N/A	10-15	5 ppm	N/A	N/A
Water	7732-18-5	55	N/A	N/A	N/A
<u>Working Solution</u>					
4-(N-Ethyl-N-2-Methane Sulfonylamino Ethyl)-2-Phenylene Diamine (CD-3)	25646-71-3	1-5	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 PRESSURE (mmHg): ~18
VAPOR DENSITY (mmHg): ~0.60 SOLUBILITY IN WATER: Complete
SPECIFIC GRAVITY: N/A pH: N/A
EVAPORATION RATE: N/A PERCENT VOLATILE BY WEIGHT: ~ 55 %
APPEARANCE AND ODOR: Light yellow when not stratified, amine odor.

Working Solution

BOILING POINT: >212° F VAPOR PRESSURE (mmHg): ~18
VAPOR DENSITY (mmHg): ~0.60 SOLUBILITY IN WATER: Complete
SPECIFIC GRAVITY: 1.028 pH: 10.70
EVAPORATION RATE: N/A PERCENT VOLATILE BY WEIGHT: ~ 99 %
APPEARANCE AND ODOR: Light yellow, amine odor.

SECTION IV - Fire and Explosion Hazard Data

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

Extinguishing Media: Use water spray, dry chemical, CO₂, 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/m³. SO₂ 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.

SECTION IX - Special Precautions

Precautions to be taken in Handling and Storage: Do not store or consume food, drink or tobacco in area. Wash thoroughly after use. Refer to section VI, incompatibility.

The information contained in this material safety data sheet is furnished without warranty of any kind. The user should consider this data a supplement to other information gathered and must make independent determination of suitability and completeness of information from this and other sources to assure proper use and disposal of this materials and the health and safety of employees and customers. This statement is incorporated as part of this Material Safety Data Sheet.