

Unusual Fire And Explosion Hazards: Fire or excessive heat may cause production of hazardous decomposition products.

Combustion Products: Carbon dioxide, carbon monoxide, oxides of nitrogen.

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Spilled Or Released: Review fire and explosion hazards and safety precautions before proceeding with cleanup. Use appropriate personal protective equipment. Avoid contact with skin and eyes. Stop the spillage. Dike the spill. Prevent liquid from entering sewers, waterways or low areas. Absorb spillage in inert material. Soak up with sawdust, sand, or other absorbent material. Remove non-usable solid material and/or contaminated soil for disposal. Discharge to sewer may require approval of local authorities and should be done with large amounts of water. Contaminated surfaces may be cleaned using water.

7. HANDLING AND STORAGE

Precautions To Be Taken In Handling And Storage: Store in a cool, dry, well ventilated area. Keep containers closed. Do not store with incompatible materials. Do not store or consume food, drink, or tobacco where they may become contaminated with this material.

Other Precautions: All labeled precautions must be observed when handling, storing and transporting empty containers due to product residues. Do not reuse containers. Triple rinse before disposal.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: When this product is used in the intended way, no respiratory protection is anticipated to be necessary.

Ventilation: Good ventilation of 10 room volumes per hour. Ventilation rates should match conditions of use.

Protective Gloves: Latex, rubber, or neoprene waterproof gloves are recommended.

Eye Protection: Safety glasses with side shields (or goggles).

Other Protective Clothing or Equipment: Rubber or plastic apron.

Work/Hygienic Practices: Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet.

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Guidelines: See Section 2.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance And Odor: Light yellow liquid, slight odor.

Boiling Point: > 100°C

Vapor Pressure: N.E.

Solubility In Water: Complete

Melting Point: Not applicable

Freezing Point: N.E.

Specific Gravity: 1.054

Vapor Density: N.E.

Percent Volatile: 72.14

Evaporation Rate: N.E.

Molecular Weight: Not applicable

Pounds Per Gallon: 8.79

Ph: 10.4

V.O.C. = 147.8 g/L or 14.0%, or 1.23 lb. /gal.

Other Properties:

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions To Avoid: Keep from heat and flame.

Incompatibility: Strong oxidizers, strong acids, strong bases, amines, nitrites, aldehydes, ketones, acrylates, organic anhydrides, and halides.

Hazardous Decomposition Or By Products: May produce carbon dioxide, carbon monoxide, and oxides of nitrogen.

Hazardous Polymerization: Will Not Occur

Conditions To Avoid: None

11. TOXICOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

Discharge, treatment or disposal may be subject to Federal, State (provincial in Canada) or local laws.

14. TRANSPORT INFORMATION

DOT Class: NOT REGULATED

Hazard Class: NONE

UN No.: NOT APPLICABLE

Packing Group:

Guide No:

Ship Name:

15. REGULATORY INFORMATION

TSCA: All ingredients in this finished product are listed on the EPA TSCA INVENTORY.

SARA TITLE III: NONE

CALIF. PROP. 65: NONE

CARCINOGENICITY: NONE OF THE COMPONENTS IN THIS CHEMICAL IS LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.

SCAQMD Rule 443.1

Photochemically Reactive: No

Maximum Grams of VOC per Liter: 147.8 gm/L

Vapor Pressure: N.E.mmHg@ 20 °C

16. INFORMATION (HMIS)

Health: 2

Flammability: 0

Reactivity: 0

Protective: C

OTHER ADDITIONAL INFORMATION: The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for injuries from the use of the product described herein.



RA-4 RT DEVELOPER & REPLENISHER PART B

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: Photo Systems, Inc. Product Name: **RA-4 RT DEVELOPER PART B**
7200 Huron River Drive, Dexter, MI 48130
Product Number: **10820, 10821** Date Prepared: 12/02/2008
Customer Information Phone Number: 1-800-521-4042
CHEMTREC®: 24 Hour Emergency Transport Phone Number: 1-800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS	OHSA PEL	ACGIH TLV	Weight %
CD-3*	25646-71-3	N.E.	N.E.	25-35
POTASSIUM METABISULFITE				
	MIXTURE	N.E.	N.E.	1-3
LITHIUM SULFATE	12003-67-7	10 mg/m ³	TWA=15mg/m ³	< 3

*Manufacturer hygiene guidelines recommend exposure limits of 1mg/m³ for sulfuric acid component of the mixture.

3. HAZARDOUS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Eye Contact: May cause irritation and burns.

Inhalation: Avoid breathing mist. May cause irritation to respiratory tract.

Ingestion: May cause irritation to the mouth, throat, esophagus, and other tissues of the gastrointestinal tract.

Skin Contact: Causes irritation; may cause allergic reaction.

Signs And Symptoms Of Exposure: Pain and reddening of eyes, skin, and throat.

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: If swallowed, give victim a glass of water or milk. Call a physician or poison control center immediately. Induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person.

Skin Contact: Flush skin with plenty of water and wash with a non-alkaline skin cleaner. Wash contaminated clothes before reuse. Get medical attention if irritation develops.

Aggravated Medical Conditions: Dermatitis, and allergic reactions for those with sulfite sensitivities.

Supplemental Health Information: None of the components in this product is listed by IARC, NTP, or OSHA as a carcinogen.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash Point: Nonflammable

Flash Point Method: Not applicable

Auto ignition: Not applicable

LEL: Not applicable

UEL: Not applicable

Extinguishing Media: Use agent appropriate for surrounding fire. Water spray, carbon dioxide, dry chemical or alcohol foam.

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

Unusual Fire And Explosion Hazards: Fire or excessive heat may cause production of hazardous decomposition products.

Combustion Products: Carbon dioxide, carbon monoxide, oxides of nitrogen, oxides of sulfur.

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Spilled Or Released: Review fire and explosion hazards and safety precautions before proceeding with cleanup. Eliminate all ignition sources. Use appropriate personal protective equipment. Avoid contact with skin and eyes. Stop the spillage. Dike the spill. Prevent liquid from entering sewers, waterways or low areas. Absorb spillage in inert material. Soak up with sawdust, sand, or other absorbent material. Remove non-usable solid material and/or contaminated soil for disposal in an approved and permitted landfill. Discharge to sewer requires approval of permitting authority and may require pre-treatment. If flushing to sewer, use large amounts of water. Contaminated surfaces should be cleaned using water.

7. HANDLING AND STORAGE

Precautions To Be Taken In Handling And Storage: Store in a cool, dry, well ventilated area. Keep containers closed. Do not store with incompatible materials. Do not store or consume food, drink, or tobacco where they may become contaminated with this material.

Other Precautions: All labeled precautions must be observed when handling, storing and transporting empty containers due to product residues. Do not reuse containers. Triple rinse before disposal.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: When this product is used in the intended way, no respiratory protection is anticipated to be necessary. If ventilation levels cannot be maintained, use an acid vapor type respirator.

Ventilation: Good ventilation of 10 room volumes per hour. Ventilation rates should match conditions of use.

Protective Gloves: Latex, rubber, or neoprene waterproof gloves are recommended.

Eye Protection: Safety glasses with side shields (or goggles).

Other Protective Clothing or Equipment: Rubber or plastic apron.

Work/Hygienic Practices: Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet.

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Guidelines: See Section 2.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance And Odor: amber yellow liquid, sharp sulfur dioxide odor.

Solubility In Water: Complete Boiling Point: > 100 °C Vapor Pressure: 18m Hg @ 20° C

Specific Gravity: 1.12 Melting Point: Not applicable Freezing Point: N.E.

Evaporation Rate: N.E. Vapor Density: 0.6 (Air=1) Percent Volatile: 75.78

Ph: 1.1 Molecular Weight: Not applicable Pounds Per Gallon: 9.31

Other Properties: V.O.C. = 0

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions To Avoid: Excessive heat

Incompatibility: Strong bases, strong acids, oxidizers

Hazardous Decomposition Or By Products: May produce carbon dioxide, carbon monoxide, and oxides of sulfur and nitrogen.

Hazardous Polymerization: Will Not Occur

11. TOXICOLOGICAL INFORMATION

Contains Lithium sulfate and CD-3 which has caused kidney damage in animals.

12. ECOLOGICAL INFORMATION**13. DISPOSAL CONSIDERATIONS**

Discharge, treatment or disposal may be subject to Federal, State (provincial in Canada) or local laws.

14. TRANSPORT INFORMATION

Ship Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

(Contains: 4-(N-Ethyl-N-2-Methanesulfonylaminoethyl)-2-Methylphenylenediamine Sesquissulfate Monohydrate)

Hazard Class: 8

UN No.: 3265

Packing Group: II

Guide No: 153

Limited Quantity Exception may apply to this product, for "inner packagings not over 1.0L (0.3 gal) for liquids and 1.0 kg (2.2 lb) for solids". 173.154 (b) (1). Each package must conform to the packaging requirements of Subpart B of Part 173 and may not exceed 30 kg (66 lb) gross weight. For further information consult the 49 CFR.

DOT Class: CONSUMER COMMODITY, ORM-D

Hazard Class: NOT APPLICABLE

UN No.: NOT APPLICABLE

Packing Group: NOT APPLICABLE

Guide No: NOT APPLICABLE

Ship Name: NOT APPLICABLE

15. REGULATORY INFORMATION

TSCA: All ingredients in this finished product are listed on the EPA TSCA INVENTORY.

SARA TITLE III: None

CALIF. PROP. 65: NONE

CARCINOGENICITY: NONE OF THE COMPONENTS IN THIS CHEMICAL IS LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.

SCAQMD Rule 443.1

Photochemically Reactive: No

Maximum Grams of VOC per Liter: 0 gm/L

Vapor Pressure: N.E. mm Hg@ 20 °C

16. OTHER INFORMATION (HMIS)

Health: 2

Flammability: 0

Reactivity: 0

Protective: C

OTHER ADDITIONAL INFORMATION: The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for injuries from the use of the product described herein.

RA-4 RT DEVELOPER & REPLENISHER PART C

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: Photo Systems, Inc. Product Name: **RA-4 RT DEVELOPER PART C**
7200 Huron River Drive, Dexter, MI 48130
Product Number: **10820, 10821** Date Prepared: 12/02/2008
Customer Information Phone Number: 1-800-521-4042
CHEMTREC®: 24 Hour Emergency Transport Phone Number: 1-800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS</u>	<u>OHSA PEL</u>	<u>ACGIH TLV</u>	<u>Weight %</u>
POTASSIUM CARBONATE	584-08-7	N.E.	N.E.	30-35
PENTASODIUM DTPA	MIXTURE	N.E.	N.E.	1-5
POTASSIUM HYDROXIDE	1310-58-3	N.E.	2mg/m ³	1-3
POTASSIUM METABISULFITE	MIXTURE	N.E.	N.E.	< 1

3. HAZARDOUS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Eye Contact: Causes severe irritation.

Inhalation: May cause irritation to respiratory tract.

Ingestion: May be harmful if swallowed. Some asthmatics or sulfite-sensitive persons may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness, and diarrhea. Can cause kidney damage and CNS effects following ingestion.

Skin Contact: Causes irritation. May cause allergic skin reaction.

Signs And Symptoms Of Exposure: Eye irritation, respiratory irritation, dermatitis, difficulty breathing, abdominal pain, skin irritation, mucus membrane irritation, coughing, nausea, diarrhea.

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: If swallowed, give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Skin Contact: Flush skin with plenty of water and wash with a non-alkaline skin cleaner. Wash contaminated clothes before reuse. Get medical attention if irritation develops.

Aggravated Medical Conditions: Individuals who are under the care of a physician or have chronic ailments, should consult a physician before using this product. Some asthmatics or sulfite-sensitive persons may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhea.

Supplemental Health Information: None of the components in this product is listed by IARC, NTP, or OSHA as carcinogen.

MATERIAL SAFETY DATA SHEET



Freezing Point: N.E.

Evaporation Rate: N.E.

Vapor Density: N.E

Percent Volatile: 62.26

Molecular Weight: Not applicable

Pounds Per Gallon: 11.3

Other Properties: V.O.C. = 0

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions To Avoid: Excessive heat.

Incompatibility: Strong Acids, strong oxidizing agents.

Hazardous Decomposition Or By Products: May produce oxides of sulfur and carbon and some bromine products.

Hazardous Polymerization: Will Not Occur

11. TOXICOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

14. TRANSPORT INFORMATION

Ship Name: CORROSIVE LIQUIDS, BASIC, INORGANIC, N.O.S. (Contains Potassium Hydroxide)

Hazard Class: 8

UN No.: 3266

Packing Group: III

Guide No: 154

Limited Quantity Exception may apply to this product, for "inner packagings not over 4.0L (1 gal) for liquids and 5.0 kg (11 lb) for solids". 173.154 (b) (2). Each package must conform to the packaging requirements of Subpart B of Part 173 and may not exceed 30 kg (66 lb) gross weight. For further information consult the 49 CFR.

DOT Class: CONSUMER COMMODITY, ORM-D

Hazard Class: NOT APPLICABLE

UN No.: NOT APPLICABLE

Packing Group: NOT APPLICABLE

Guide No: NOT APPLICABLE

Ship Name: NOT APPLICABLE

ORM-D QUANTITIES OF HAZARDOUS MATERIALS ARE EXEMPT FROM LABELING AND SHIPPING

15. REGULATORY INFORMATION

TSCA: All ingredients in this finished product are listed on the EPA TSCA INVENTORY.

SARA TITLE III: NONE

CALIF. PROP. 65: Product contains a mixture which includes trace amounts of Trisodium NTA. The State of California's Safe Drinking Water and Toxic Enforcement Act of 1986, or Proposition 65 requires the following information. This regulation does not address de minimus levels; therefore, even trace amounts of the chemicals included on Proposition 65's list of chemicals known to the State of California to cause cancer or reproductive toxicity must be noted with the

“Safe Harbor” wording. WARNING: This product contains Trisodium NTA – known to the State of California to cause cancer, birth defects or other reproductive harm.

CARCINOGENICITY: NONE OF THE COMPONENTS IN THIS CHEMICAL IS ABOVE THE MINIMUM AMOUNT LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.

SCAQMD Rule 443.1

Photochemically Reactive: No

Maximum Grams of VOC per Liter: 0 gm/L

Vapor Pressure: N.E. mm Hg@ 20 °C

16. OTHER INFORMATION (HMIS)

Health: 2

Flammability: 0

Reactivity: 0

Protective: C

OTHER ADDITIONAL INFORMATION: The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for injuries from the use of the product described herein.