



MATERIAL SAFETY DATA SHEET

2000RT DEVELOPER 1+4

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: 2000RT DEVELOPER 1+4

PART No.: IP9608-1+4

UN/NA (PIN) No.: 0

EMERGENCY TELEPHONE: FOR MEDICAL EMERGENCY IN THE UNITED STATES AND CANADA CALL 1-800-842-9660 (PRODUCT MISUSE). FOR TRANSPORTATION EMERGENCY CALL CHEMTREC 1-800-424-9300.

SUPPLIER: ILFORD Imaging USA Inc
West 70 Century Road, Paramus, NJ 07653
Tel: 201-265-6000

CONTACT PERSON: Bryan Sammartino

2. COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT NAME:	CAS No.:	CONTENTS :	EPA RQ:	TPQ:
SODIUM SULPHITE	7757-83-7	1-5 %		
POTASSIUM CARBONATE	584-08-7	0-1 %		
HYDROQUINONE	123-31-9	0-1 %		
1-PHENYL-4-METHYL-4-HYDROXYMETHYL-3-PYRAZOLIDONE	13047-13-7	0-1 %		
SODIUM BROMIDE	7647-15-6	0-1 %		
DITHIO-BIS-CARBONIC ACID	63684-32-2	0-1 %		
DIETHYLENETRIAMINE PENTAACETIC ACID-NA5	67-43-6	0-1 %		

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Colorless or pale yellow, odorless, weakly alkaline, water-based, non-flammable liquid. Contains hydroquinone.

Not regarded as a health hazard under current legislation.

ACUTE EFFECTS:

INHALATION: No specific health warnings noted.

INGESTION: No specific health warnings noted.

SKIN: No specific health warnings noted.

EYES: No specific health warnings noted.

CHRONIC EFFECTS:

HEALTH WARNINGS:

No specific health warnings noted.No specific acute or chronic health impact noted, but this chemical may still have adverse impact on human health, either in general or on certain individuals with pre-existing or latent health problems.

ROUTE OF ENTRY:

Ingestion. Skin and/or eye contact.

4. FIRST AID MEASURES

INHALATION: No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

INGESTION: Rinse mouth thoroughly. Drink plenty of water. Get medical attention if any discomfort continues.

SKIN: Rinse with water.

EYES: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with lots of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

This material is not flammable. Use extinguishing media appropriate for surrounding fire.

HAZARDOUS COMBUSTION PRODUCTS:

Fire creates: Irritating gases/vapors/fumes. Sulfur dioxide.

6. ACCIDENTAL RELEASE MEASURES

SPILL CLEAN-UP PROCEDURES:

Non-hazardous substance. Do not contaminate drainage or waterways. Absorb spill with non-reactive absorbent and place in non-reactive containers for disposal. Contain Spill. Use large quantities of water to flush small spills to sanitary sewer if local regulations permit. Do not flush to septic tank. See Section 13 for disposal considerations. Flush with plenty of water to clean spillage area. Prevent discharge of larger quantity to drain.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS:

Avoid spilling, skin and eye contact. Read and follow manufacturer's recommendations. Provide good ventilation.

STORAGE PRECAUTIONS:

Keep in cool, dry, ventilated storage and closed containers. Keep in original container.

STORAGE CRITERIA:

Chemical storage.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

PROTECTIVE EQUIPMENT:**ENGINEERING CONTROLS:**

Provide eyewash station and safety shower.

VENTILATION: Provide adequate general and local exhaust ventilation. Must not be handled in confined spaces without adequate ventilation. General room ventilation should provide for 10 - 15 room air changes per hour.

RESPIRATORS: Not relevant.

PROTECTIVE GLOVES:

Use protective gloves made of: Rubber (natural, latex). Neoprene. Polyethylene.

EYE PROTECTION:

If risk of splashing, wear safety goggles or face shield.

PROTECTIVE CLOTHING:

Wear appropriate clothing to prevent any possibility of skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE:	Liquid. Water soluble.	
COLOR:	Colorless.	
ODOR:	No characteristic odor.	
SOLUBILITY DESCRIPTION:	Soluble in water.	
BOILING POINT (°F, interval):	212	PRESSURE: 760mmHg
DENSITY/SPECIFIC GRAVITY (g/ml):	1.225	TEMPERATURE (°F): 68
pH-VALUE, CONC. SOLUTION:	10.40	

10. STABILITY AND REACTIVITY

STABILITY: Normally stable.

CONDITIONS TO AVOID:

Avoid excessive heat for prolonged periods of time. Avoid contact with acids.

HAZARDOUS POLYMERIZATION:

Will not polymerize.

MATERIALS TO AVOID:

Avoid contact with other photographic solutions and/or cleaning compounds.

HAZARDOUS DECOMPOSITION PRODUCTS:

Irritating gases/vapors/fumes of: Sulfur dioxide.

11. TOXICOLOGICAL INFORMATION

TOXIC DOSE - LD 50: hydroquinone 320; Dimezone S 1007 mg/kg (oral rat)

TOXICOLOGICAL INFORMATION:

This chemical formulation has not been tested for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

12. ECOLOGICAL INFORMATION

LC 50, 96 HRS, FISH, mg/l: 0.1 hydroquinone; >300 DTPA; >1 Dimezone S

EC 50, 48 HRS, DAPHNIA, mg/l: >10 DTPA; 7.1 Dimezone S
IC 50, 72 HRS, ALGAE, mg/l: 1.0 hydroquinone

ECOLOGICAL INFORMATION:
 Not regarded as dangerous for the environment.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:

Unused and spent solutions may be allowed to be discharged to sanitary sewer by permit IF allowed by local regulations. Consult your local authority for advice. Waste may have to be pretreated before discharge. Consult local authorities before discharging any waste to sewer. Do not discharge to septic system. Waste that cannot be discharged to sewer may have to be handled by a licensed hazardous waste contractor.

14. TRANSPORT INFORMATION

GENERAL: To obtain additional information on packaging for shipment refer to the Code of Federal Regulations - CFR 49 and your carrier.

U.S. DOT:
UN/NA No.: 0
U.S. DOT HAZARD LABEL: No DOT label requirement noted
U.S. DOT CLASS: No classification noted.
INFORMATION ON ROAD TRANSPORT: Not classified for road transport

SEA TRANSPORT:
INFORMATION ON SEA TRANSPORT: Not classified for sea transport

AIR TRANSPORT:
INFORMATION ON AIR TRANSPORT: Not classified for air transport

15. REGULATORY INFORMATION

REGULATORY STATUS OF INGREDIENTS:

NAME:	CAS No:	TSCA:	CERCLA:	SARA 302:	SARA 313:	DSL(CAN):
POTASSIUM CARBONATE	584-08-7	Yes	No	No	No	No
1-PHENYL-4-METHYL-4-HYDROXYMETHYL	13047-13-7	Yes	No	No	No	Yes
DITHIO-BIS-CARBONIC ACID	63684-32-2	Yes	No	No	No	Yes
DIETHYLENETRIAMINE PENTAACETIC ACID-NA5	67-43-6	Yes	No	No	No	Yes

US FEDERAL REGULATIONS:
REGULATORY STATUS: TSCA: The ingredients of this product are on the TSCA Inventory.

ENVIRONMENTAL LISTING: Hydroquinone: Clean Air Act, S.111 (40 CFR 60-EPA). DOT Hazardous Mat. Transp. Act (49 CFR). NTP-Annual Plan (DHHS). NIOSH Criteria Documents. IRPTC-International Register of Potentially Toxic Chemicals (UNEP). OSHA Chemical Hazard Commun. Std. - Air Contaminants (29CFR1910). ACGIH Threshold Limit Values. EPA Reportable & Threshold Quantities. SARA Section 302, Extremely Hazardous Substances. SARA Section 313, Toxic Chemicals. SARA Title III Consolidated Chemical List (302, CERCLA, 313, RCRA).

STATE REGULATIONS:
STATE REGULATORY STATUS: Florida Hazardous Substance List Massachusetts Extraordinarily Hazardous Substances List Massachusetts Right-to-Know. New Jersey Right-to-Know. NJ Environmental Hazardous Substances List NJ Special Hazardous Substances List Pennsylvania Right-to-Know.

16. OTHER INFORMATION

USER NOTES:

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INFORMATION SOURCES:

European Photographic Chemical Industry Code of Practice For Classification And Labelling Material Safety Data Sheet, Misc. manufacturers. Safeware Quasar Ltd
USA Regulatory Information ANSI Z400.1-1998 Material Safety Data Sheets - Preparation

PREPARED BY:

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REVISION No./Repl. MSDS of:

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