

TECHNICAL INFORMATION BULLETIN

KODAK RP X-OMAT Developer and Replenisher

Mixing Instructions

Updated January 10, 2002

Important Information Before You Begin

- Observe the precautionary information on the containers.
- Use ventilation with enough air circulation or exhaust to keep the mixing area free from strong odors (change 10 room-volumes of air per hour).
- Wear rubber gloves, eye protection (visor goggles or face shield), and a chemically impervious apron when mixing chemicals.
- To avoid release of irritating vapor(s), always follow mixing instructions.
- When filling the processor with both developer and fixer solutions, fill the fixer tank *first*.

Automixer

- A new mix of replenisher solution should be made when the low-solution level indicator is activated.
- Be sure the tank has enough room to accept the additional amount of liquid volume to be mixed.
- Before making the *initial mix* of replenisher solution, refer to the start-up procedures included in the automixer's operating instructions.
- Be sure the automixer has been set to provide the proper dilution.
- For best results, water temperature should be 70°-80°F (21°-27°C).

5 Gallons (19 Litres)

Step	Action		
1	RP X-OMAT Developer and Replenisher, Part A (one bottle)	For each Step (1 thru 3): a. Remove the bottle's plastic cap.	
2	RP X-OMAT Developer and Replenisher, Part B (one bottle)	b. Do not remove or puncture the foil membrane covering the top of the bottle.	
3	RP X-OMAT Developer and Replenisher, Part C (one bottle)	c. Remove the dust cover from the top of the automixer.d. Insert the bottle in the appropriate template. Make sure the foil membrane is punctured by the probe to allow the solution to flow into the mixing tank.	
4	Water will automatically fill the mixing tank. When properly diluted, the specific gravity of the developer should be 1.081 to 1.091.		
5	Remove the empty bottles and place the dust cover on the automixer.		

Manual Mixing

5 or 10 Gallons (19 or 38 Litres)

- The concentrated Parts A, B, and C must be mixed at the recommended dilution.
- Always measure and record the quantity of developer replenisher solution in the replenisher tank before mixing.
- Be sure the tank has enough room to accept additional liquid volume (5 or 10 gallons / 19 or 38 litres).
- A floating lid is required to control oxidation after mixing.

	Start with Water 70°-80°F (21°-27°C)	While Stirring Continuously, Slowly Add (in order)			
To Make		Part A	Part B	Part C*	
5 Gallons (19 Litres)	3.7 gallons (14 litres)	1 bottle	1 bottle	1 bottle	
10 Gallons (38 Litres)	7.4 gallons (28 litres)	2 bottles	2 bottles	2 bottles	

^{*} After adding Part C, stir continuously until solution is completely mixed (appx. 2 minutes).

200 Gallons (757 Litres)

- The concentrated Parts A, B, and C must be mixed at the recommended dilution.
- Start with the required volume of water. Add the chemical parts *slowly* and *in the order indicated*.
- The 200-gallon size consists of three (3) parts:
 - Part A: one drum of liquid
 - Part B: two containers of liquid
 - Part C: two containers of liquid

	Start with Water	While Stirring Continuously, Slowly Add (in order)			
To Make	70°-80°F (21°-27°C)	Part A	Part B	Part C*	
200 Gallons	146.3 gallons	1 drum	2 containers	2 containers	
(757 Litres)	(554 litres)	(50 gallons / 189 litres)	(1.9 gallons / 7.1 litres)	(1.8 gallons / 6.7 litres)	
100 Gallons	73.2 gallons	25 gallons	1 container	1 container	
(379 Litres)	(277 litres)	(94.6 litres)	(120 fl oz. / 3.55 litres)	(112.6 fl oz. / 3.33 litres)	
40 Gallons	29.3 gallons	10 gallons	48 fl oz.	45 fl oz.	
(151.4 Litres)	(111 litres)	(38 litres)	(1.42 litres)	(1.33 litres)	

^{*} After adding Part C, stir continuously until the solution is completely mixed.

	Start with Water 70°-80°F (21°-27°C)	While Stirring Continuously, Slowly Add (in order)		
To Make		Part A	Part B	Part C*
20 Gallons	14.6 gallons	5 gallons	24 fl oz.	22.5 fl oz.
(76 Litres)	(55.4 litres)	(18.9 litres)	(710 mL)	(666 mL)
* After adding Part C, stir continuously until the solution is completely mixed.				

400 Gallons (1514 Litres)

- Start with the required volume of water. Add the chemical parts *slowly* and *in the order indicated*. Stir well after adding each chemical.
- The 400-gallon mix *should not be split* to mix 200 gallons.
- The 400-gallon size consists of four (4) parts:
 - Part I: one (1) drum of liquid
 - Part II: two (2) containers of powder
 - Part III: one (1) container of KODAK Hydroquinone, photographic grade
 - Part IV: one (1) container of liquid

	Start with	While Stirring Continuously, Slowly Add (in order)			
To Make	Water 70°-80°F (21°-27°C)	Part I	Part II	Part III	Part IV*
400 Gallons	338 gallons	1 drum	2 containers	73.6 lbs	1 container
(1514 Litres)	(1279 litres)	(50 gal/189 litres)	(98.8 lbs/44.8 kg)	(33.5 kg)	(3.2 gal/12.1 litres)

* Note:

- Part IV must be added **very slowly**.
- Attach a KODAK Screw Cap Dispenser Tube, Model II (Catalog 1905090) to the container. Make sure the tube end is below the surface of the mixing solution while dispensing Part IV.
- Do Not Rinse the Empty Container into the Mix.
- After adding Part IV, stir continuously until the solution is completely mixed.

To Prepare a Working Solution

- Use the splash guard to avoid contamination of the developer with fixer.
- Maintain the operating temperatures and the chemical replenishment rates recommended in *Processing Recommendations for KODAK X-OMAT Processors, KODAK X-OMAT Multiloaders, and KODAK MIN-R Mammography Processors,* (Service Bulletin 30).

Note: When filling the processor with both developer and fixer solutions, fill the fixer tank *first*.

Step	Action
1	Place the splash guard between the developer and fixer tanks.
2	Remove the developer rack.
3	Fill the developer tank to the fill line. See <u>Service Bulletin 30</u> for the correct starter volume for your processor.
4	Replace the developer rack.

Additional Information

MSDS

Material Safety Data Sheets are available online via the MSDS Search Page.

Storage and Handling

<u>Click Here</u> for Storage and Handling Conditions for KODAK Medical Processing Chemicals.

Kodak, Min-R, and X-Omat are trademarks of Eastman Kodak Company.

Note: Technical Information Bulletins provide information of limited or specific application. Responsibility for judging the applicability of the information for a specific use rests with the end user.