

## X-OMAT DBF

X-OMAT DBF<sup>1</sup> is a high quality dental x-ray film appropriate for all extra-oral exams. This product is compatible with all types of existing equipment used in the radiographic imaging chain. X-OMAT DBF is a full-speed, medium contrast blue-sensitive dental x-ray screen film that is intended for dental extra-oral radiography. This film is coated on blue, approximately 0.2 mm (7-mil) polyester base. X-OMAT DBF uses T-GRAIN emulsion technology that reduces the amount of screen-light crossover, resulting in excellent image sharpness. It is designed for standard cycle machine processing using RP X-OMAT chemicals. It may also be processed in standard dental film processors using READYMATIC chemicals.

Features include:

- Enhanced blue image tone delivers optimal viewing characteristics and reduces eye fatigue
- Manual or automatic processing in standard cycle
- Robust processing tolerance with excellent speed and contrast stability under variable processing conditions helping to ensure consistent results

### Sensitometric and Photographic Properties:

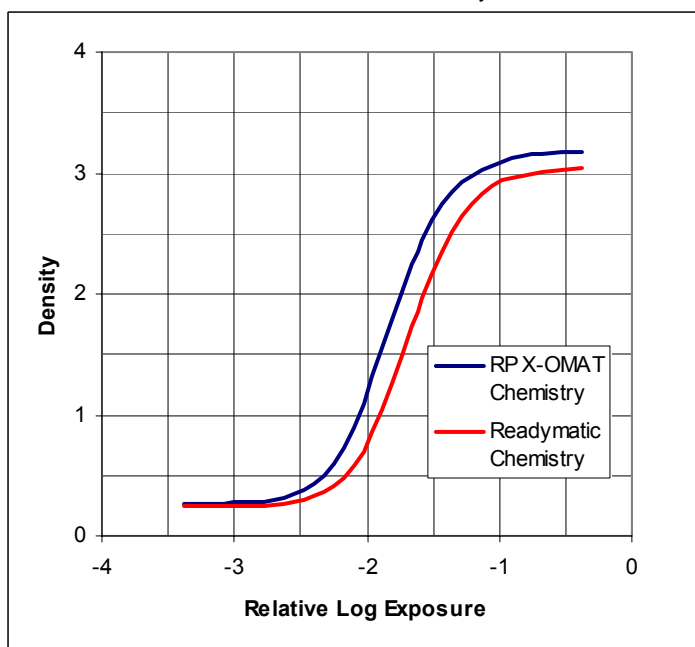
| Screen   | System Speed |
|----------|--------------|
| X-OMATIC | 200          |

### Sensitometric Parameters:

|                  |                                                                                                                                                    |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Speed</b>     | Measured at 1.0 OD above Gross Fog                                                                                                                 |
| <b>Contrast</b>  | Measured as slope of the straight line portion of the sensitometric curve, and computed as the value for the rise for any three consecutive steps. |
| <b>Gross Fog</b> | Density of film base plus processing fog.                                                                                                          |

### X-OMAT DBF

Simulated Sensitometry; RP X-OMAT Chemicals, X-OMAT 5000 RA  
 READYMATIC Chemicals, A/T2000  
 Diffuse Visual Densitometry



Notice: While the data presented are typical of production coatings, they do not represent standards which must be met by Carestream Health, Inc.. Varying storage, exposure, and processing conditions will affect results. The company reserves the right to change and improve the product characteristics at any time.

<sup>1</sup> Also known as KODAK X-OMAT DBF Dental Film

### Automatic Processing Recommendations:

In general, processing is recommended in dental roller processors using READYMATIC chemicals.

### Influence of developer temperature in case of automatic processing

|       |             |       |
|-------|-------------|-------|
| -2 °C | Ref         | +2 °C |
| -0.01 | Base fog    | +0.01 |
| -15 % | Sensitivity | +7 %  |
| -2 %  | Contrast    | +2 %  |

### Sensitometric Quality Control (only for Germany and Switzerland)

The film was tested with a calibrated light sensitometer and processed in X-OMAT 5000 RA Processor, filled with fresh RP X-OMAT chemicals.

Characteristics were measured according to DIN 6868-5

|    |   |      |               |
|----|---|------|---------------|
| LE | = | 1.56 | +/- 0.09      |
| LK | = | 2.67 | +/- 11 %      |
| EI | = | 1.00 | step = 9      |
| KI | = | 1.82 | step = 12 – 9 |

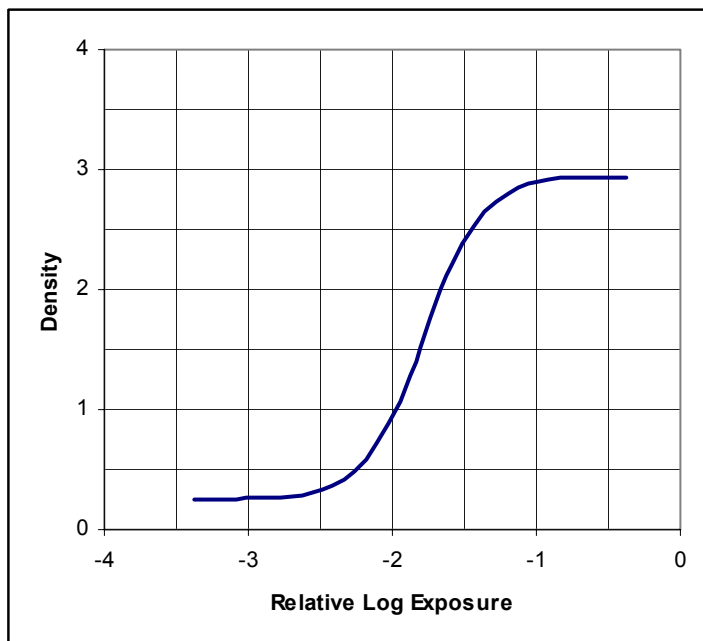
### Manual Processing Recommendations

| Solution/<br>Step                                                                                                                                                                                       | Temperature            | Time          | Agitation                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------|-----------------------------------------------------------------------------------------------------|
| GBX Developer working solution                                                                                                                                                                          | 22 °C<br>(72 °F)       | 4 minutes     | Tap sheet film hangers lightly on side of tank immediately after immersion to dislodge air bubbles. |
|                                                                                                                                                                                                         | 26.5 °C<br>(80 °F)     | 2 1/2 minutes |                                                                                                     |
| NOTE: DO NOT agitate films during remainder of development step. Remove film and hanger 5 seconds before end of development. DO NOT allow films to drain excess developer back into the developer tank. |                        |               |                                                                                                     |
| Running Water Rinse                                                                                                                                                                                     | 16–30 °C<br>(60–85 °F) | 30 seconds    | Immerse hanger rapidly; agitate continuously.                                                       |
| GBX Fixer OR RP X-OMAT LO Fixer working solution                                                                                                                                                        | 16–30 °C<br>(60–85 °F) | 2–4 minutes   | Intermittent, 5 second every 30 seconds.                                                            |
| Running Water Wash (about 8 volume changes/hour)                                                                                                                                                        | 16–30 °C<br>(60–85 °F) | 10 minutes    | —                                                                                                   |
| Dry in a dust-free area at room temperature or a suitable drying cabinet. Temperature not to exceed 49 °C (120 °F).                                                                                     |                        |               |                                                                                                     |

**Note:** Dry in a dust-free area at room temperature or a suitable drying cabinet. Temperature not to exceed 49 °C (120 °F). Keep developer covered when not in use to reduce the rate of oxidation and evaporation and to prevent contamination.

### X-OMAT DBF

Simulated Sensitometry  
GBX Chemicals, 4 minutes, 22 °C (72 °F) Manual Process;  
Diffuse Visual Densitometry



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### Influence of developer temperature in case of manual processing

The developing time must be adjusted as per the following table:

|                          |    |    |      |      |
|--------------------------|----|----|------|------|
| Temperature °C :         | 20 | 22 | 24.5 | 26.5 |
| Developer Time (minutes) | 5  | 4  | 3    | 2.5  |

*Note: the results obtained are dependent on exposure and processing conditions*

Notice: The data in this publication represent product tested under the conditions of exposure and processing specified. They are representative of production coatings, and therefore do not apply to a particular box or roll of photographic material. They do not represent standards or specifications that must be met by Carestream Health, Inc. The company reserves the right to change and improve product characteristics at any time.

## Storage and Handling

### Storage -

|            |                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                        |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unexposed: | <br><br> | <p>10–24 °C (50–75 °F) Do not refrigerate or freeze as this can cause condensation to occur.</p> <p>30–50 %RH</p> <p>Protect from heat and radioactive sources. Film is to be properly shielded from x-rays, gamma rays, or penetrating radiation.</p> |
| Exposed:   | Keep cool, dry, and properly shielded from penetrating radiation. Process as soon as possible.                                                                                                                                                              |                                                                                                                                                                                                                                                        |
| Processed: | 16–27 °C (60–80 °F), 30–50 %RH                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                        |

The film should be used before the expiration date  indicated on the box with the lot (emulsion) number **LOT**.

### Handling -

Hands must be clean, dry and free of lotions, etc. Film should be handled carefully by the edges to avoid physical strains such as pressure, creasing, or buckling. Luminous watches, cell phone and darkroom light leaks should be avoided.



Do not re-use. Film is a single use medical device.

### Safelight Filter

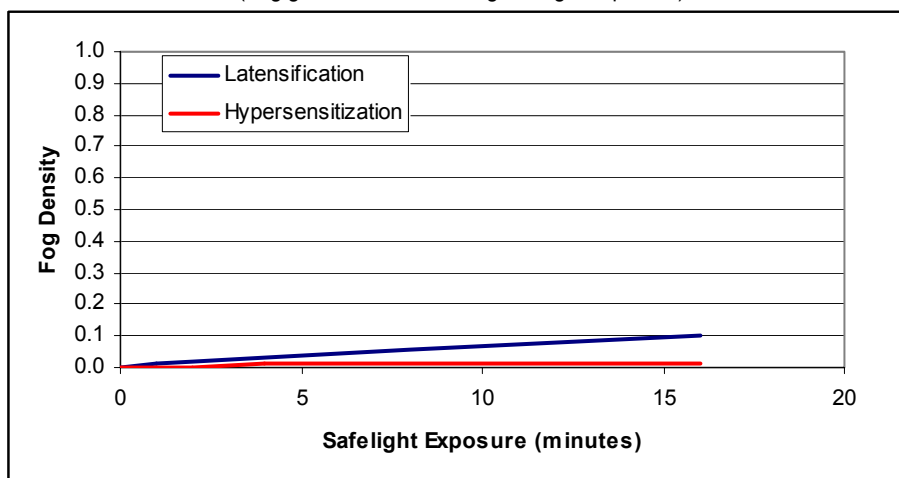
Use a Ruby Red Safelight Filter (wavelength > 520nm), such as GBX-2, with a frosted 15-watt bulb or a LED Safelight located at least 1.22 metres (48 inches) from the film.

**Latensification:** Safelight exposure after primary x-ray exposure.

**Hypersensitization:** Safelight exposure prior to primary x-ray exposure.

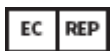
#### X-OMAT DBF

GBX-2 Safelight Filter, 15-watt lamp  
(Fog growth with increasing safelight exposure)



The contents of this publication are subject to change without notice.

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