Carestream DENTAL

Technical Data Sheet

EVG

EVG is a very high quality dental X-ray film, compatible with all types of existing equipment used in the radiographic imaging chain. EVG is a double side emulsion orthochromatic film, coated on a blue polyester base. It contains a specific anti-cross-over layer to improve radiographic quality. This film must be used in combination with green emitting EV screens to obtain optimum quality.

Due to the use of the T-Grain technology, the characteristics of EVG are:

- very high contrast
- high sensitivity
- very high sharpness
- high gloss radiographs

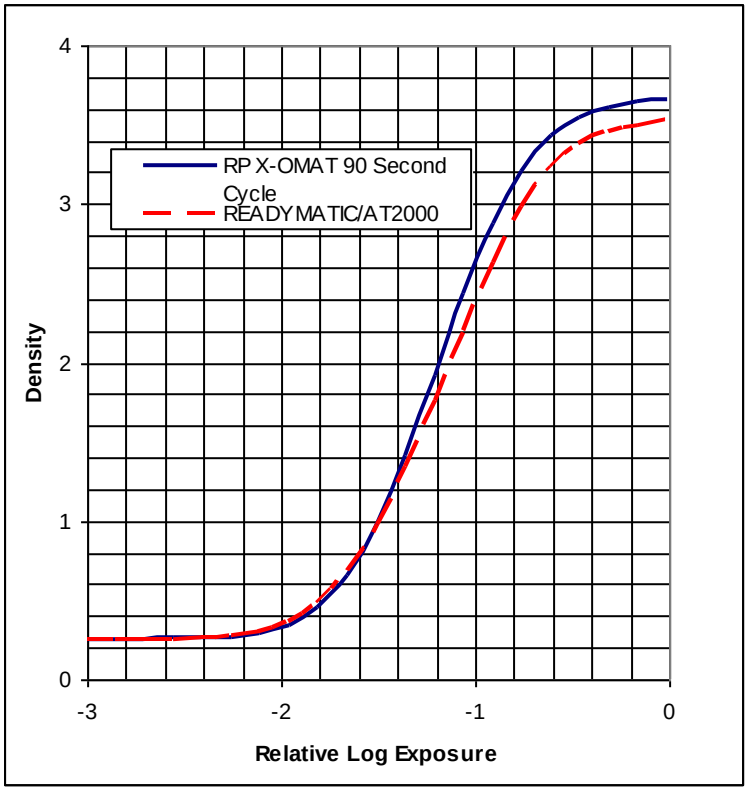
Sensitometric and Photographic Properties:

Screen	System Speed
EV	400
LANEX Regular	400
LANEX Medium	250

Sensitometric Parameters:

Speed	Measured at 1.0 OD above Gross Fog
Contrast	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.
Gross Fog	Density of film base plus processing fog.

EVG
Simulated Green Screen 1/50 second
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.

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 ºC	Ref	+2 ºC
0	Base fog	0
-6 %	Sensitivity	+5 %
-0.5 %	Contrast	-2 %

Sensitometric Quality Control

(only for Germany and Switzerland)

The film was tested with a calibrated light sensitometer and processed in an A/T2000 processor, filled with fresh READYMATIC Chemicals. *Note that since the DIN sensitometer creates a single side exposure and EVG has an anti-cross-over layer, these values **do not** reflect the real contrast and density of the film when used as designed.*

Characteristics were measured according to DIN 6868-55

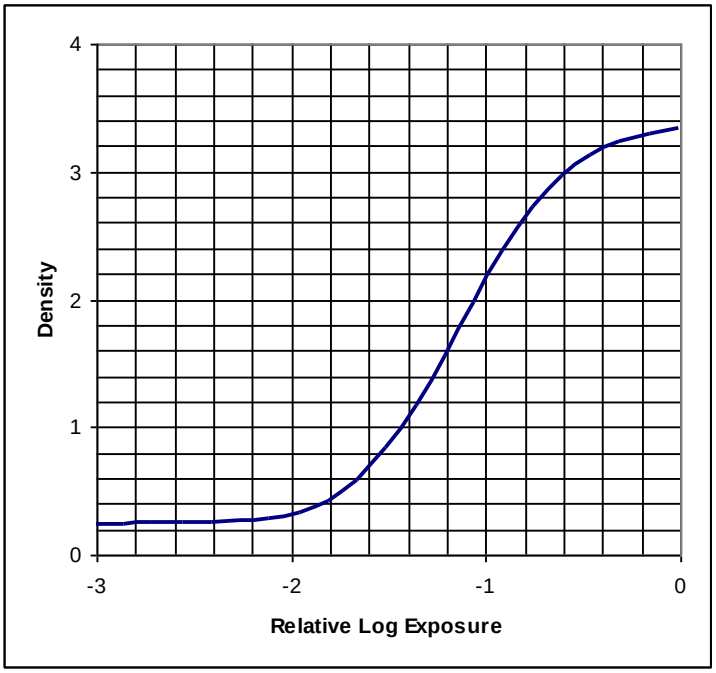
LE	=	1.85	+/- 0.09
LK	=	1.60	+/- 11 %
EI	=	1.32	step = 9
KI	=	1.06	step = 12 – 9

Manual Processing Recommendations

Solution/ Step	Tempera-ture	Time	Agitation
GBX Developer and Replenisher	22 °C (72 °F) 26.5 °C (80 °F)	4 minutes 2 1/2 minutes	Tap sheet film hangers lightly on side of tank immediately after immersion to dislodge air bubbles.
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 (60–85 °F)	30 seconds	Immerse hanger rapidly; agitate continuously.
GBX Fixer and Replenisher OR RP X-OMAT LO Fixer and Replenisher	16–30 °C (60–85 °F)	2–4 minutes	Intermittent, 5 second every 30 seconds.
Running Water Wash (about 8 volume changes/ hour)	16–30 °C (60–85 °F)	5 minutes	—-
Dry in a dust-free area at room temperature or a suitable drying cabinet. Temperature not to exceed 49 °C (120 °F).			

EVG

1/50 second Simulated Green Screen Exposure
Seasoned GBX Developer, 4 minutes, 22 °C (72 °F) Manual Process;
Diffuse Visual Densitometry



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Influence of developer temperature in case of manual processing

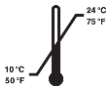
The developing time must be adjusted as per the following the table:

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

Storage and Handling

Storage -

Unexposed:		10–24 °C (50–75 °F)
		30–50 %RH
		Protect from heat and radioactive sources. Film is to be properly shielded from x-rays, gamma rays, or penetrating radiation.
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 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 Required

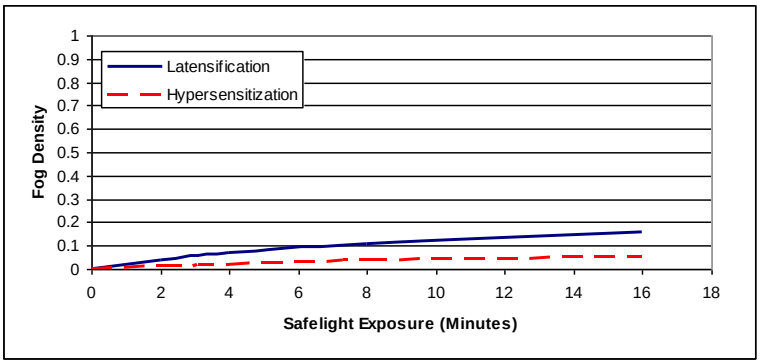
Use a Ruby Red Safelight Filter, such as GBX-2, with a frosted 15-watt bulb or a LED Safelight located at least 1.22 metres (48 inches) from the film.

Latensification:

Safelight exposure after primary x-ray exposure.

EVG

GBX-2 Safelight Filter, 15-watt lamp / LED Safelight / 1.22 metres (48 inches)
RP X-OMAT Chemicals, 35 °C (95 °F)
(Fog growth with increasing safelight exposure)



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