Carestream

Technical Data Sheet

Issued 2016-04

INSIGHT Thoracic Film

INSIGHT Thoracic Film is a high speed, orthochromatic medical x-ray film for use with INSIGHT screens (special asymmetrical green light emitting intensifying screens). INSIGHT Thoracic Film has asymmetrical T-grain emulsion technology with absorbing dyes that reduce screen-light crossover to zero. This film features good static protection. When used as designed with INSIGHT Thoracic Screens, the film exhibits improved visualization of mediastinum, retrocardiac, and retrodiaphragmatic areas while yielding improved resolution of fine detail on both lung field and bony structures. It may be processed in existing automated processing cycles.

This asymmetrical product is designed to be used with a specific film-screen orientation, which is facilitated by both a notch in the film and a special dye in one emulsion of the film. When the notch is in the upper right hand corner of the film, the backside emulsion is facing up. This emulsion must be in contact with the back, or non-tube side intensifying screen. The opposite emulsion, or front side emulsion, contains a special dye for darkroom identification, and must be in contact with the front, or tube side screen.

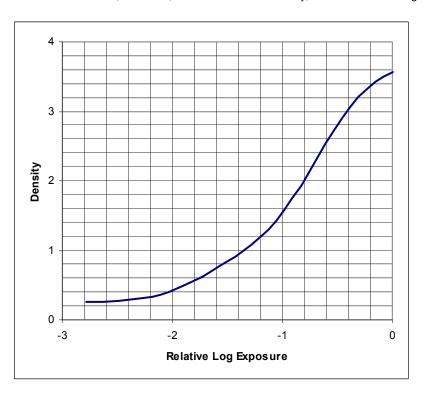
Sensitometric and Photographic Properties:

Screen	System Speed
INSIGHT	250
INSIGHT HC	335

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	Density of film base
Fog	plus processing fog.

INSIGHT Thoracic Film 1/25 second Simulated Green Screen Exposure; RP X-OMAT Chemicals; RP X-OMAT Processor, Model M6; Diffuse Visual Densitometry; 90-second Processing



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.

Automatic Processing Recommendations:

In general, processing is recommended in X-OMAT and RP X-OMAT Processors using RP X-OMAT or X-OMAT EX II Developer and Replenisher and RP X-OMAT LO Fixer and Replenisher.

Influence of developer temperature in case of automatic processing

-2 °C	Ref	+2 °C
0	Base fog	0.04
-12 %	Sensitivity	+13 %
0 %	Contrast	-3 %

Replenishment Rate Recommendations for X-OMAT or RP X-OMAT Processors (Replenishment by length)

Film Size Processed	Use Condition	Average Number of Films per 8 hours processor	Replenishment Rates (ml per 35 x 43 cm)		
		operation	Developer	Fixer	
35 x 35 cm (only)	High	90 sheets or more	50	70	
	Medium	30 – 90 sheets	65	85	
	Low	30 sheets or less*	80	100	
Average size intermix	High	115 sheets or more	50	70	
	Medium	40 – 115 sheets	65	85	
	Low	40 sheets or less*	80	100	
35 x 43 cm (only)	High	75 sheets or more	60	85	
	Medium	25 – 75 sheets	80	100	
	Low	25 sheets or less*	100	120	
*If sensitometry does not stay within control limits, flooded replenishment may be needed.					

Please refer to Service Bulletin No. 30, available on the Carestream website or upon request, for additional processing recommendations.

Recommended Starter Volumes

Developer	Starter (Added to processor developer tank)
RP, EX II	89 ml (3 fl. Oz.) per 3.78 Litres (1 gallon)

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	er Time 🔒		5	4
(minutes)	0	'	5	4

Storage and Handling

Storage -		
Unexposed:	24 °C 75 °F	10–24 °C (50–75 °F)
	10°C 50°F	Do not refrigerate or freeze as this can cause condensation to occur.
		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	0 °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



Use a Ruby Red Safelight Filter, such as GBX-2, with a frosted 15-watt bulb

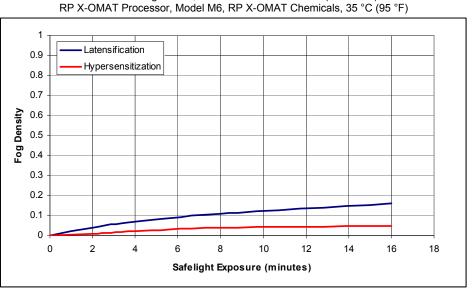
or a LED Safelight located at least 1.22 metres (48 inches) from the film.

Latensification: Safelight exposure after primary x-ray exposure.

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



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INSIGHT Thoracic Film GBX-2 Safelight Filter, 15-watt bulb / 1.22 metres (48 inches)

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