# VELOPEX E/F DENTAL RADIOGRAPHIC FILM

## Characteristic

VELOPEX E/F is a double-emulsion extra high speed non-screen X-ray film (ISO Class E-F) with high contrast and low fine grain. The film has high image quality and outstanding detail definition. The film is intended for direct-exposure routine intraoral radiographs. This extra high speed of the film enables to reduce the X-ray dose of 50% in comparison with the dental films of D class and of 20% in comparison with E class.

#### Film base

VELOPEX E/F is coated on a dimensionally-stable bluish 0.175 mm thick polyester film base. The film is provided, on both sides, with protective and antistatic layers preserving the film against mechanical damages and eliminating the static charge.

# **Packing**

Each sheet of film is enclosed in a light-tight plastic envelope.

size	Size	number of films	Number of packets in
ISO	(mm)	in packet	one packing
0	22.0x35.0	1	100
2	30.5x40.5	1	150

This soft and hygienic packing protects the patient, facilitates manipulation with the film and enables disinfecting the cover with common disinfectants. Every film packet is protected with a lead sheet on the side opposite to radiation source (marked as back-side on the packet). Each film is provided with an embossed dot located near the edge of the film that serves as an identificator of the radiation side on the processed film. Its raised portion indicates the side facing the radiation source.

# **Darkroom illumination**

VELOPEX E/F can be exposed in daylight. The processing shall carried out in a darkroom using indirect dark-red or olive-green safelight. Recommended safelight filters are: KODAK GBX-2, Agfa R1 (dark-red), Agfa G7 (olive-green).

## **Processing**

VELOPEX E/F can be processed manually or in processors. The VELOPEX solutions are recommended for processing the film to obtain the best results, but any good trademarked chemicals may be used too. The film is possible to be processed in all common types of processors. Results depend on duration of processing cycle and adjusted temperature. For processing times, please follow the manufacturer's instructions.

Automatic processing	Manual processing	
4.5–5.0 min / 25°C	5.0 min / 20°C	
	4 .0 min / 22°C	
	3.5 min / 24 °C	
	1.5 min / 28 °C	

X-ray apparatus adjustment: 50 – 70 kV and 7 – 15 mA (use correct values recommended by the apparatus manufacturer)

Adjustment: 65 kV, 8 mA, 20 cm focus-film distance						
Maxillary	Exposure	Mandibular	Exposure			
Frontal	0.13 s	Frontal	0.10 s			
Premolar	0.17 s	Premolar	0.11 s			
Molar	0.19 s	Molar	0.13 s			

For making exposures of children reduce the exposure time approx. by 33%. For making exposures of empty patches reduce the exposure time approx. by 25%. For obtaining the possibly best results all the necessary changes of exposure parameters (i.e. exposure time, mA, kV or any changes of the focus-film distance) shall be reflected in other parameters.

## Storage

VELOPEX E/F should be stored in the original packing in a dry and cool place at a temperature from  $10^{\circ}\text{C}$  to  $21^{\circ}\text{C}$  and a relative humidity of 40-60% protected from damaging fumes, gases and ionizing radiation. For long term storage the film should be stored in a refrigerator. Before use, the film in the intact original packaging should be allowed to adjust to room conditions for at least 2-4 hours.

## Warning

Tel.: 020 8965 2913

Fax: 020 8963 1270

Using and processing VELOPEX E/F film results in wastes that are classified as special wastes. For this reason ecological disposal and recycling is necessary. The disposal of the wastes shall be in compliance with the disposal or recycling national laws.

# Classification of the wastes:

Polyvinylchloride wastes developer chemistry Lead wastes fixer chemistry

The product has CE marking and has been produced and marketed in conformity with a quality system according to the international standard EN ISO 9001:2008, EN ISO 13485:2003.

Email: enquiries@velopex.com

**Exposure conditions for VELOPEX E/F**