



X PLEX

**THE DOUBLE  
MAKER**

THE NEW DUAL HIGH-IMPACT POLYMER  
BY CANDULOR



**HOT +  
COLD**  
DUAL POLYMER



XPLEX – the HIGH-IMPACT polymer for dual use. Developed to cover the different processes and needs in the laboratory. The new polymer is suitable for hot and cold polymerization. Whether packing, pressing or pouring: the choice of HOT or COLD processing, is governed by the respective HOT or COLD monomer component.

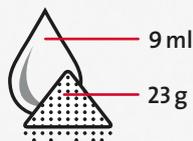
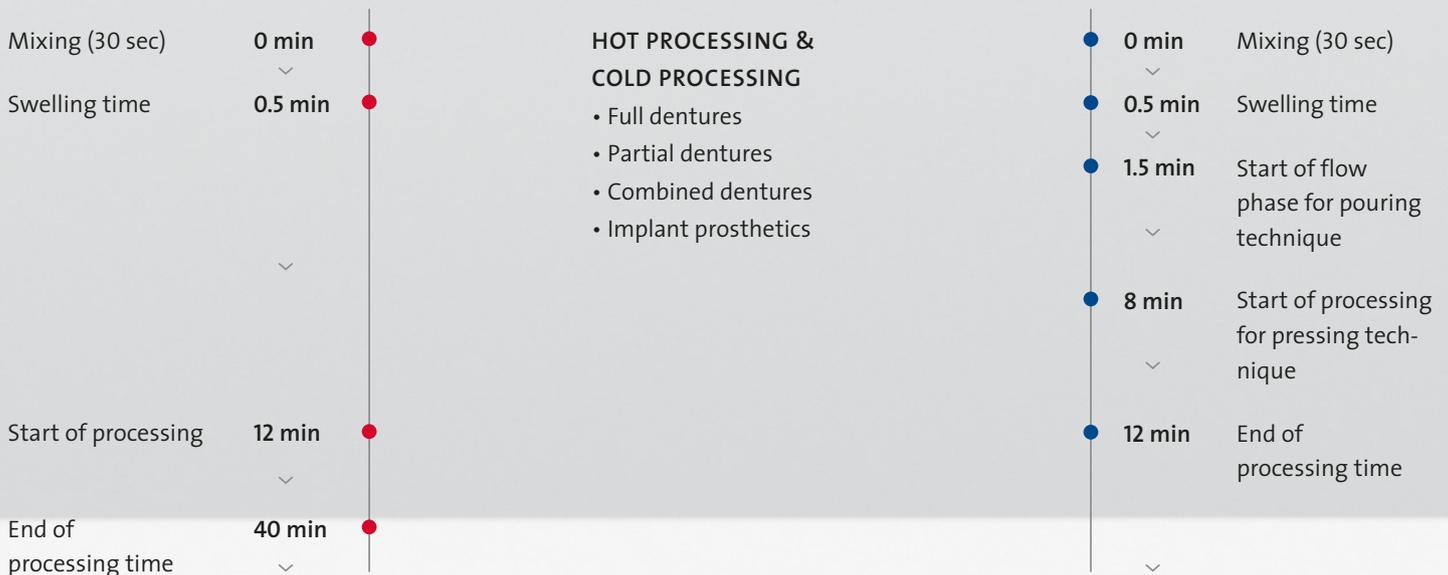
**XPLEX – THE DOUBLE MAKER**

# BECAUSE GOOD PROCESSING IS SIMPLY IMPORTANT

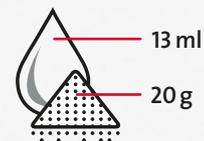
## HOT >>

REPAIRS TO XPLEX HOT CAN BE PERFORMED WITH XPLEX COLD.

## COLD



MIXING RATIO  
PRESSING TECHNIQUE



MIXING RATIO  
POURING & PACKING TECHNIQUE

# »»» » X PLEX



## ADVANTAGES OF XPLEX PRODUCTS IN PROCESSING

- Easy dosing
- Simple mixing technique
- Easy to grind
- Bubble-free workpieces

XPLEX IS CHARACTERIZED IN  
PARTICULAR BY ITS GOOD FLOW  
AND MODELING PROPERTIES.



# RELIABLE MATERIAL PERFORMANCE ACROSS ALL TECHNIQUES: PRESSING, PACKING, POURING

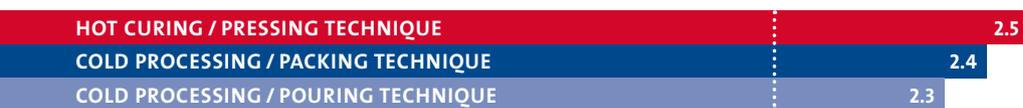
## XPLEX FLEXURAL STRENGTH [MPa]



## XPLEX FLEXURAL MODULUS [MPa]



## XPLEX FRACTURE TOUGHNESS ( $K_{MAX}$ ) [MPa m<sup>1/2</sup>]



## XPLEX FRACTURE WORK [J/cm<sup>2</sup>]



..... Standard values from EN ISO 20795:1

No matter whether you use HOT or COLD processing, the four key measurements show that good material performance is achieved across all finishing processes.

### FLEXURAL STRENGTH

The flexural strength is the tensile or compressive stress in the peripheral fiber of a component, which occurs under load and leads to plastic deformation of the component or to breakage.

### FLEXURAL MODULUS

The flexural modulus (also known as the modulus of elasticity) describes the linear-elastic behavior of a resin when applying pressure.

### FRACTURE TOUGHNESS ( $K_{MAX}$ )

The fracture toughness factor is a measure of the resistance of a material to abrupt (dynamic) stress.

### FRACTURE WORK

Fracture work describes the energy required to fracture the test specimen after the crack opening force ( $K_{MAX}$ ) occurs.



# PERFORMANCE FACTS



## THE BENEFITS OF HIGH-IMPACT MATERIAL PROPERTIES

**FOR THE LABORATORY** Compared to conventional PMMA materials, the fracture resistance is increased significantly. Repairs and additions can be performed with the same material quality.

**FOR THE DENTIST** The improved physical properties of the material offer high fracture strength, which can contribute to long-lasting dentures and satisfied patients.

**FOR THE PATIENT** More safety in everyday life, even if the denture should be dropped. Furthermore, the material has a tendency to low plaque adhesion, low discoloration and is easy to clean.



# STRONG PERFORMANCE



XPLEX DENTURES WITH CHARACTER  
AND HIGH IMPACT STRENGTH



- Good bond to denture teeth
- Good polishability
- Esthetic appearance
- Low adhesion of plaque
- Low tendency to discoloration

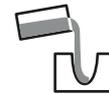
# CREATING A HIGH-IMPACT ON THE PATIENT THROUGH POWERFUL ESTHETICS



HOT / PRESSING



COLD / PACKING



COLD / POURING





1/



3/



4/

2/



5/



1/ Trial Kit

2/ 100 g polymer 34, 53, 55, 57

3/ 500 ml / 150 ml HOT monomer

4/ 500 ml / 150 ml COLD monomer

5/ 500 g polymer 1, 3, 5, 34

THE CANDULOR AESTHETIC INTENSIVE COLORS CAN BE USED WITH X PLEX.

Intensive stains for individualized dentures.

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# XPLEX RANGE

AT A GLANCE





CANDULOR AG

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