



Instruction For Use

■ Introduction

KK Cast is a monomer-based acrylic resin for manufacturing 3D-printed castable parts with high flexural strength, hardness, low shrinkage, and low residue after casting.

■ Applications

KK Cast can be used for LCD 3D printers.

■ Storage conditions

KK Cast should be stored and transported in the original packaging at room temperature in a dry and dark area, preferably not exceeding 25°C.

■ Processing/post-curing

Shake KK Cast well in the original packaging for approximately 1 minute before using it. It is recommended to wear nitrile gloves when using KK Cast until the post-curing procedure is completed.

1. Printing

Pour the KK Cast into the resin tank of the 3D printer. Follow the instructions for use for the 3D-printing machine to start printing.

2. Washing/Drying

Remove the printed parts from the build platform and soak in 95% ethanol to remove the extra resin. Rinsing in alcohol solution should not take longer than 15 minutes, as this will cause defects in the printed parts. Ensure the printed parts are clean. DO NOT remain liquid resin and ethanol.

3. Post-curing

Place the printed jobs in a UV- light curing box for final polymerization. The curing time depends on the curing energy of post-curing lightbox. For example, using Formlabs FormCure curing box at 405nm at 60°C for 10 minutes.

4. Finishing

Using conventional dental methods and instruments, remove any support structures and finish jobs if necessary.

5. Casting

KK Cast can be used for casting all types of dental metals, printed parts will burn without residue at a minimum temperature of 700°C over 45 minutes.

■ Material properties

Property	Requirement	Result	ISO standard
Flexural strength	≥ 60 Mpa	≥ 70 Mpa	ISO 178
Flexural modulus	≥ 1500 Mpa	≥ 2100 Mpa	ISO 178
Hardness shore D	≥ 80 shore D	83 shore D	ISO 7619-1