# e-shell 3xx, 5xx, 600 series for earpieces

# Instructions for use

**English** 

#### Description:

e-shell (3xx, 5xx, 600 series) are light curing materials for additive manufacturing of individual hearing aid shells and/or earmolds. The materials are adjusted for the DSP® System (Digital Shell Printer) by Envisiontec GmbH.

### Ingredients:

Acrylates-/ methacrylates; photo initiators; dyes; absorber.

#### Indication

Manufacture of individual precise hearing aid shells without integrated face plates and/or earmolds.

Indication	Туре
Hearing aid shell	e-shell, 302, 303, 306, 307, 501
Hearing aid shell/ earmold	<b>e-shell</b> 300, 300B1, 301, 301B1; 308, 309, 310, 500, 600

Maximum wall thickness of hearing aid shells: 1,2 mm. Maximum wall thickness for e-shell 500: 2 mm.

#### Contraindication:

<u>Patient and user:</u> Products out of e-shell must not be used if an allergic reaction to any of the ingredients is known.

<u>User.</u> Adolescent and expectant mothers must not come in contact with unpolymerized material.

#### Interaction:

No interactions have been observed.

### Secondary effects:

Patient and user: Product may cause allergic reaction.

<u>User</u>: Disregarding of warning notes unpolymerized material may damage the unborn child and suspected of damaging fertility, may cause skin, serious eye and respiratory irritation.

# Warning notes:

Contains Tetrahydrofurfurylmethacrylat, acrylates and phosphineoxides. Pay attention to safety data sheet. Avoid breathing vapours, use extraction unit. Avoid contact respectively wear protective gloves, protective clothing, eye protection. If on skin: wash with plenty of water. If skin irritation occurs: Get medical advice. Material is harmful to environment, avoid release to the environment

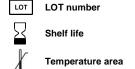
### Storage instructions:

Protect from light. Self-polymerisation is possible. Do not use after shelf life. Store between 5°C and 30°C.

### **Disposal instructions:**

Dispose of contents/ container in accordance with local regulation.

# Symbols:



Follow instructions for use



Protect from sunlight

# Material parameters:

e-shell series	Light source	Voxel depth
3xx series	UV	100µm
600	UV	100µm
5xx series	UV	100µm

Building parameters must be chosen according to the guidelines of the machine manufacturer and have to ensure sufficient adhesion of layers.

# **Manufacturing Process:**

# MANUFACTURING PROCESS

# Prepare Data

Follow specification of supplier.

#### Define process parameters

Follow specification of supplier.

# **Build parts**

### **POST PROCESS**

#### Clean parts

Cleaning in Isopropanol (max. 5 min); under pouring conditions (no ultrasonic). Recommendation: Magnetic stirrer with bar or lab shaker. Clean and rinse vents separately.

### Dry parts

Dry parts with compressed air; dry parts 30 min at 37°C using cabinet dryer with outlet air/air circulation.

# Remove supports

#### Post cure parts

Light unit: Otoflash G 171; parameters: shells 4000 flashes, earmold 2000 flashes; For shells: place opening of the shell towards the lamps. Recommendation: under inert gas.

# Clean parts

Cleaning in Isopropanol (max. 2 min); under pouring conditions (no ultrasonic). Recommendation: Magnetic stirrer with bar or lab shaker. Clean and rinse vents separately.

### Dry parts

with compressed air.

#### Option 1 Option 2 e for e-shell 500/501 Coat parts Polish parts Indication for lacquer must be given. Polish surface with handpiece or autom. device according to instructions for use of manufacturer. Cure coating According to instructions for use of lagucer manufacturer. Post cure parts Otoflash G171 with 1000 flashes. **Final product** Final product

# Notices:

The final properties depend on the post process. The post curing is adjusted to the light curing unit Otoflash G171 with / without inert atmosphere. Using an alternative light source could affect the end properties of the product. Please notice that the light sources need a routine maintenance following the manufacturer instructions

Delivery unit: Container of 1 kg



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