

Product Specification

Product name (product number)	e-on Single Shade Universal (6186-307 and 6186-478)		
Type of material	Shade adaptive light cure composite with excellent high gloss polishability		
Recommended medical device classification	Class IIa (93/42 EEC)		
Relevant Standards	ISO 4049		
	Parameter	Typical Values	Requirements of ISO 4049
Typical composition	Mixture of difunctional methacrylates, prepolymerized resin, fumed silica, photoinitiator, stabilizer, pigments Total filler content (by weight) Total filler content (by volume) Specific gravity (20 °C; 68 °F)	80 % 75 % 1.89 g/cm ³	
Working properties	Recommended curing time (dental light cure unit, minimum 1000 mW/cm ² , wavelength range 400 – 500 nm) Working time (full operating light) Depth of cure (40 sec)	minimum 20 sec > 60 sec > 2 mm*	 > 60 sec > 1,5 mm
Physical properties	Flexural strength Flexural modulus Compressive strength Diametrale tensile strength Barcol hardness (after 24h) Water sorption Water solubility Color stability Polishability Radiopacity Shrinkage (after 24h) Wear (ACTA, 1 month)	120 MPa 8500 MPa 290 MPa 45 MPa 80 <25 µg/mm ³ <5 µg/mm ³ very good high gloss, opalescent 200 % Al 2.1 % < 50 µm	> 80 MPa < 40 µg/mm ³ < 7,5 µg/mm ³ see ISO 7491
Storage		< 25 °C (77 °F)	
Shelf life		3 years	

* the measured value (height of the cylinder of cured material) divided by two, according to ISO 4049