

Easy-Mix S 50 yellow



visually identifiable casting compound | resistant to high temperatures | fast-curing | impact-resistant

WEICON Easy-Mix S 50 yellow is a highly reactive casting compound. It can also be used as an adhesive owing to its high adhesive strength and short curing time. The epoxy resin system, which is resistant to high temperatures of up to +180 °C, is viscous, self-levelling, cures quickly and is impact-resistant in its hardened state. The casting compound has a short pot life of 4-5 minutes. The compound adheres excellently to many different surfaces, such as metal, plastics, fibreglass-reinforced plastics, wood, glass, ceramics and stone. The casting compound can be used in electronic engineering for protecting electronic components, semiconductors and building components. It protects components against moisture, dust and dirt as well as mechanical stresses. Easy-Mix S 50 yellow is suitable for applications in many different areas, such as grouting work in electrical engineering and the electronics industry, for casting cable connections, for applications in insulating technology, in metal construction, in tank and apparatus construction, fittings construction, and in ventilating and air-conditioning systems. Thanks to its distinctive yellow colour, Easy-Mix S 50 yellow makes visual control simple. The casting compound is processed with the user-friendly Easy-Mix system.

The Dispenser Easy-Mix D 50 is required for processing Easy-Mix products in 50 ml cartridges.

Characteristics

Base	Epoxy
Filler	unfilled
Texture	liquid
Colour	yellow
Minimum shelf life	at room temperature 18 mon.

Processing

Processing temperature	+15 °C to +40 °C
Component temperature	>3°C above dew point
Cure temperature	+6 °C to +40 °C
Relative air humidity	max. 85%
Mixing ratio by volume	1:1
Viscosity of the mixture at +20 °C	4,500 mPa·s
Density of the mixture	1,2 g/cm ³
Gap bridging up to max.	2 mm

Curing

Pot life at 20 °C, 10 g batch	4-5 min.
Handling strength (35 % strength)	17 min.
Working strength after (80 % strength)	30 min.
Final strength (100 % strength)	24 h
Shrinkage	1,06 %

Mechanical properties after curing

- Measured after curing at		24 h RT + 24 h 60 °C
Tensile strength	DIN EN ISO 527-2	39 N/mm ²
Elongation at break (tensile)	DIN EN ISO 527-2	2 %
E-modulus (tensile)	DIN EN ISO 527-2	1.800 - 2.100 MPa
Compressive strength	DIN EN ISO 604	30 MPa
Bending strength	DIN EN ISO 178	58 MPa
Hardness (Shore D)	DIN ISO 7619	81 ± 3
Lap shear strength material thickn. 1,5mm DIN EN 1465		
	Steel 1.0338 sandblasted	21 N/mm ²
	Stainless steel V2A sandblasted	23 N/mm ²
	Aluminium sandblasted	12 N/mm ²
	Galvanized steel	13 N/mm ²
	PVC-rigid roughened	13 N/mm ²

Thermal parameters

Temperature resistance	-50 °C to +180 °C (-58 °F to +356 °F)
Thermal conductivity	DIN EN ISO 22007-4 0,24 W/m·K
Heat capacity	DIN EN ISO 22007-4 1,482 J/(g·K)

Electrical parameters

Resistance	DIN EN 62631-3-1 1,03·10 ¹¹ Ω·m
Dielectric strength	DIN EN 60243-1 (20°C) 20 kV/mm
Magnetic	no

Approvals / Guidelines

ISSA Code	75.629.51
IMPA Code	812975

Instructions for use

When using WEICON products, the physical, safety-related, toxicological and ecological data and regulations in our EC safety data sheets (www.weicon.com) must be observed.

Surface Pre-Treatment

Clean and dry bonding surfaces are essential for flawless adhesive bonding (e.g. cleaning and degreasing with WEICON Surface Cleaner).

Application

WEICON Easy-Mix products can be processed straight from the double cartridge by means of the included static mixer. Dismiss the first 5 cm of the adhesive bead. The adhesive is applied to just one side.

Note

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The specified pot life refers to a material batch of 10 ml at room temperature. Larger batch quantities will result in faster curing. Higher temperatures also reduce the pot life and curing time. (General rule: every increase by +10 °C above room temperature results in a decrease of the pot life and curing time by half). Temperatures below +16 °C increase the pot life and curing time significantly. From approx. +5 °C and below, no reaction takes place.

Storage

WEICON epoxy adhesives should be stored in a dry place at room temperature. Unopened containers can be stored at temperatures from +18 °C to +25 °C. Protect from direct sunlight. Failure to observe these storage instructions will reduce the shelf life to 6 months. Epoxy resins generally tend to crystallise at temperatures below +5 °C. This effect is increased by large temperature fluctuations, e.g. during transport especially in the winter months. This has a negative impact on processing, curing and technical data, can, however, be reversed by heating the product (up to max. +50 °C, no open flame). In WEICON epoxy adhesives, crystallisation is reduced by the careful choice and combination of base resins (bisphenol A and F).

Scope of delivery

Adhesive

Accessories

10005237	Dispenser Easy-Mix D 50, 1 PCE
10029793	Quadro Mixing Nozzle B, 1 PCE, grey
10101999	WEICON Manual Dispenser, 1 x 1:1 2:1
10068261	Dosing Tip A Size 0,5 mm, 1 PCE

Conversion table

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$	$\text{Nm} \times 8.851 = \text{lb}\cdot\text{in}$
$\text{mm}/25.4 = \text{inch}$	$\text{Nm} \times 0.738 = \text{lb}\cdot\text{ft}$
$\mu\text{m}/25.4 = \text{mil}$	$\text{Nm} \times 141.62 = \text{oz}\cdot\text{in}$
$\text{N} \times 0.225 = \text{lb}$	$\text{mPa}\cdot\text{s} = \text{cP}$
$\text{N}/\text{mm}^2 \times 145 = \text{psi}$	$\text{N}/\text{cm} \times 0.571 = \text{lb}/\text{in}$
$\text{MPa} \times 145 = \text{psi}$	$\text{kV}/\text{mm} \times 25.4 = \text{V}/\text{mil}$

Available sizes

10017543 Easy-Mix S 50 yellow, 50 ml, yellow

To the product detail page:



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Chemical resistance after curing* (Excerpt)

1,4-Dioxane	-	Glycol	+
Exhaust fumes	+	Uric acid	-
Adipic acid	-	Impregnating oils	+
aliphatic hydrocarbons	+	Iodides (K, Na etc.)	-
Formic acid >10 % (methanoic acid)	-	Potassium carbonate	+
Ammonia anhydrous 25%	-	Potassium hydroxide 0-20 % (caustic potash)	+
Aniline	-	Milk of lime	+
aromatic hydrocarbons	+	Cresol	-
Barium hydroxide	+	Magnesium hydroxide	+
Benzoic acid	-	Maleic acid (cis-ethylenedicarboxylic acid)	-
Benzyl alcohol	-	Methanol (methyl alcohol) <85 %	o
Benzyl chloride	-	Methylene chloride	-
Boric acid	-	Mineral oil	+
Bromides	-	Naphthalene	+
Butadiene (1,3-)	-	Sodium bicarbonate (sodium hydrogen carbonate)	+
Butyric acid	-	Sodium carbonate (soda)	+
Butyl acetate	o	Sodium chloride (table salt)	+
Butyl alcohol	o	Nitrates	-
Calcium hydroxide (slaked lime)	+	Nitrobenzene	-
Chloroanilines	-	Oils, vegetable and animal	+
Chloroform (trichlormethane)	-	Oxalic acid <25 % (ethanedioic acid)	o
Chlorosulphuric acid (wet and dry)	-	Perchloroethylene	-
Chlorosilanes	-	Kerosene	+
Chlorinated water (swimming pool concentration)	-	Phenol	-
Chromates (K, Na, etc.)	-	Phosphoric acid <50%	+
Chromic acid	-	Phthalic acid, phthalic anhydride	-
Cyanides (K, Na etc.)	-	Nitric acid <5%	-
Cyclohexanone	-	Sulphur dioxide (wet and dry)	-
Diethyl ether	+	Carbon disulphide	-
Mineral oil and mineral oil products	+	Sulphuric acid <5%	+
Acetic acid diluted <5%	o	Soap solution	+
Ethanol <85 % (ethyl alcohol)	o	Turpentine	+
Greases, oils and waxes	+	Carbon tetrachloride (tetrachloromethane)	-
Hydrofluoric acid	-	Tetralin (tetrahydronaphthalene)	-
Tannic acid diluted <7%	o	Trichloroethylene	-
Glycerin (trihydroxipropane)	+	Hydrogen peroxide <30 % (hydrogen superoxide)	o

+ = resistant 0 = for a limited time - = not resistant *The storage of all WEICON Plastic Metal types was carried out at +20°C chemical temperature.

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