

# WEICON Balancing Putty



## Kneadable balancing compound | fast application without tools

WEICON Balancing Putty is an easy-to-use, cold-curing 2-component epoxy resin system. The resin putty is used especially for balancing armatures for electric motors. Compared to machining processes such as drilling or milling, this type of balancing has several advantages. No tools are required for the processing of the balancing putty. And no work is required on the armature core. This results in a quality improvement in terms of motor noise and efficiency. The use of putty saves time, as e.g. deburring the balanced areas is not necessary. Armatures, which were single-plane balanced by machining, can be two-plane balanced with the Balancing Putty without requiring additional time. No metal chips are created, which can get caught in the winding and cause damage. The potential risk of accidents during drilling and/or milling is eliminated. For example, the Balancing Putty is not shaken off in the test run (in uncured condition) during the balancing process at 3000 rpm (diameter of the armature 40mm).

### Characteristics

Base	Epoxy
Filler	mineral
Texture	pasty
Minimum shelf life	at room temperature 36 mon.

### Processing

Processing temperature	+15 °C to +40 °C
Cure temperature	+6 °C to +40 °C
Mixing ratio by weight	100:86
Mixing ratio by volume	100:79
Density of the mixture	2,5 g/cm <sup>3</sup>
Consumption	Layer thickness 1.0 mm 2.5 kg/m <sup>2</sup>

### Curing

Pot life	at 20 °C	60 min.
Working strength after		10 h
Final strength	(100 % strength)	16 h
Shrinkage		0,05 %

### Mechanical properties after curing

Tensile strength		30 MPa
E-modulus (tensile)	DIN EN ISO 527-2	4.000 - 6.000 MPa
Compressive strength	DIN EN ISO 604	80 MPa
Hardness (Shore D)		90

### Thermal parameters

Temperature resistance		-40 °C to +130 °C (briefly up to +300 °C)
Tg after curing at room temperature		~ 80 °C
Heat deflection resistance	DIN EN ISO 75-2	+ 95 °C
Thermal expansion coefficient	ISO 11359	40 · 10 <sup>-6</sup> 1/m·K
Thermal conductivity		0,6 W/m·K

### Electrical parameters

Resistance		1,0 · 10 <sup>14</sup> Ω·m
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### 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](http://www.weicon.com)) must be observed.

### Surface Pre-Treatment

Surfaces must be grease-free and clean, roughen if necessary.

### Application

Mixing ratio by volume 1:1; by weight 100 parts resin (blue): 86 parts hardener (yellow). Mix both components until the mixture has taken on a uniform green colour. In case of blue or yellow inclusions, the mixing process was insufficient.

### Storage

WEICON Epoxy Resin Systems should be stored in a dry place at room temperature. Unopened containers can be stored at temperatures from +18 °C to +28 °C. Opened containers must be used up within 6 months.

### Scope of delivery

Instructions for use | Resin & Hardener

### Conversion table

(°C x 1.8) + 32 = °F  
mm/25.4 = inch  
µm/25.4 = mil  
N x 0.225 = lb  
N/mm<sup>2</sup> x 145 = psi  
MPa x 145 = psi

Nm x 8.851 = lb·in  
Nm x 0.738 = lb·ft  
Nm x 141.62 = oz·in  
mPa·s = cP  
N/cm x 0.571 = lb/in  
kV/mm x 25.4 = V/mil

### Note

The specifications and recommendations given in this technical data sheet must not be seen as guaranteed product characteristics. They are based on our laboratory tests and on practical experience. Since individual application conditions are beyond our knowledge, control and responsibility, this information is provided without any obligation. We do guarantee the continuously high quality of our products. However, own adequate laboratory and practical tests to find out if the product in question meets the requested properties are recommended. A claim cannot be derived from them. The user bears the only responsibility for non-appropriate or other than specified applications.

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# WEICON Balancing Putty

## Available sizes

10000129	WEICON Balancing Putty, 400 g
10000113	WEICON Balancing Putty, 1 kg
10000114	WEICON Balancing Putty, 5 kg

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)	-	Perchloraethylene	-
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	Trichloraethylene	-
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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