

KEOL**EPOXY ADHESIVE****K-POXY 4223**

2C



- VIBRATION AND IMPACT RESISTANT
- ELECTRICALLY INSULATING
- THERMALLY CONDUCTIVE
- FAST ROOM TEMPERATURE CURE

4223 adhesive from the K-POXY range is a two-component, fast-curing thermally conductive epoxy adhesive. K-POXY 4223 has a simple 1:1 mix ratio and develops 1,400 psi (aluminum to aluminum) Lap shear strength in four hours at room temperature. After only twenty-four hours, the force is over 2,200 psi. K-POXY 4223 provides fast heat dissipation for a wide range of electronic applications. Black resin and white hardener provide excellent visual indication of complete mixing.

CHEMICAL BASIS

Epoxy

SETTING TIME

2 hours (ambient temperature)

COLOR

Grey

HARDNESS

80D

RATIO

1:1

PROPERTIES	Resin	Hardener
Color	Black	White
Viscosity @25°C	70000	70000
Density at 25°C cps	1.5	1.5
REACTIVITIES		
Freezing time* @25°C 15 grams	15 minutes	
Shore hardness @25°C	80D	
Shore hardness @70°C	50D	
Shear strength psi After 4h	1,413psi	
Shear strength psi After 24h	2231psi	
Thermal conductivity, W/m-°K	1.04	
Dielectric strength, V/mil	440	
Dielectric constant @25°C , 100Hz	5.3	
Volume resistivity, ohm-cm @25°C	2.4x1012	
Coefficient of thermal expansion ppm/°C under TG	45	
Above the TG	175	
Operating temperature °C	-40 to +120	

LE K DES COLLES !

KEOL

EPOXY ADHESIVE



NOTES

- 1) At room temperature, **4223 adhesive from the K-POXY range** will reach cure in 1 to 2 hours. The shear strength of the overlay is 1413 psi after 4 hours.
- 2) **4223 adhesive from the K-POXY range** is an adhesive and is not intended for potting and encapsulation applications. **4223 adhesive from the K-POXY range** is a fast reacting epoxy system that creates a high exothermic temperature in large masses (avoid masses over 25 grams).



APPLICATION

- 1) Surfaces must be clean and free of grease. Use an oil-free solvent such as acetone to wipe surfaces. Adhesion can be greatly increased by abrading the surfaces to be bonded with emery cloth, sandpaper, carbide grinding tools, sandblasting, etc. A rough, porous surface will give the best results. Any oxidized metallic film should be removed just prior to applying the epoxy adhesive mixture.
- 2) Apply the mixed product to the support to be bonded.
- 3) Join substrates in 3-5 minutes.
- 4) Hardening according to one of the following programs:
25°C 2-4 hours
65°C < 10 minutes



STORAGE & PACKAGING

4223 adhesive from the K-POXY range is available 1:1: 50ml, 200ml and 400ml double barrel cartridges. The expected shelf life is 12 months. Store in a cool, dry place in the original containers.

Please read and understand the Safety Data Sheet (SDS) before using this product.



NOTE

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