EPOCAST

TECHNICAL BULLETIN – EPOCAST 36®
INFO 1 - 6- 98- EP - E - K

Revised: 05/2018

INTRODUCTION
EPOCAST 36® is a two-component pourable chocking compound with excellent physical characteristics replacing the conventional method of steel chocks when used for mounting main and auxiliary engines, gear boxes, steering gears, thrust bearings, stern tubes, etc.

EPOCAST 36® chocks are not only econimical to fit but offer additional benefits such as their ability to fill any reasonable irregularity in the chocking interface and to reduce noise and vibration.

FEATURES AND BENEFITS:
- Saves weight
- Simple and economical to use
- Chemical resistant
- Up to 100 mm chock thickness (depends on surroundings and temperature)
- Reduces noise and vibrations
- Compensates uneven foundations
- No need for machining of foundation
- High compressive and impact strength
- Nearly 100% of the force lines are conducted to the base
- Viscosity can be adjusted by pre-heating of resin compound

PROPERTIES	NORM	DIMENSION	EPOCAST 36®	SPECIAL TEST CONDITIONS
Compressive Modulus of Elasticity	ASTM D 695	N/mm^2	5610	
Compressive Yield Strength	ASTM D 695	N/mm^2	131	
Compressive Strength	ASTM D 695	N/mm^2	164	- 50°C → 196 ; + 80°C → 123
Compressive Strain a Rupture	ASTM D 695	%	11,8	
Tensile Strength at Break	ASTM D 695	N/mm^2	49,4	
Percentage Elongation at Rupture	ASTM D 638	%	0,9	
Izod Impact	ASTM D 256	-06a J/cm	0,211	M4963/3
Barcol hardness	ASTM D 2583	-	55	
Thermal Expansion linear	-	K^{-1}	$31,0x10^{-6}$ $43,8x10^{-6}$	- 50°C - +/- 0°C +/- 0°C - + 60°C
Elastic Shear Modulus	-	N/mm^2	2360	
Logarithmic Decrement	DIN 53445 (ASTM D 2236)	-	0,043	
Dielectric Strength	DIN 53481 (ASTM D 149)	kV/mm	18,8	
Insulation DC-Resistance	DIN 53482 (ASTM D 257)	x cm	$3,7 \times 10^{15}$ $3,7 \times 10^{15}$	100 V 1000 V
Surface DC-Resistance	DIN 53482 (ASTM D 257)		$5,3 \times 10^{11}$ $1,3 \times 10^{13}$	100 V 1000 V
Friction Coefficient	-	-	0,57	Starting Value
Flexual Strength	ASTM D 790	N/mm^2	113 95 99 82 81 53	- 30°C +/- 0°C + 23°C + 50°C + 70°C + 100°C
Maximum Strain	ASTM D 790	%	1,6 1,5 1,9 1,9 2,5 3,1	- 30°C +/- 0°C + 23°C + 50°C + 70°C + 100°C
Deformation under Load	ASTM D 621	% / mm	0,02 0,003 0,04 0,005 0,06 0,007 0,09 0,011 0,02 0,003 0,04 0,005 0,07 0,009 0,11 0,014 0,04 0,005 0,05 0,006 0,10 0,013 0,19 0,024 0,07 0,009 0,09 0,011 0,13 0,016 0,23 0,029 0,10 0,013 0,13 0,016 0,15 0,020 0,23 0,030 0,13 0,016 0,15 0,019 0,17 0,021 0,32 0,040	- 30°C Load 550 N „ 1100 N „ 2230 N „ 4450 N Load 550 N +/- 0°C „ 1110 N „ 2230 N „ 4450 N Load 550 N + 23°C „ 1110 N „ 2230 N „ 4450 N Load 550 N + 50°C „ 1110 N „ 2230 N „ 4450 N Load 550 N + 70°C „ 1110 N „ 2230 N „ 4450 N Load 550 N + 100°C „ 1110 N „ 2230 N „ 4450 N

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PROPERTIES	NORM	DIMENSION	EPOCAST 36®	SPECIAL TEST CONDITIONS
Pulsating Compressive Test	-	-	Pulsation of Load $7{,}5x10^6$ $7{,}5x10^6$ $7{,}5x10^6$ $6{,}0x10^6$ 1364 $6{,}0x10^6$ $6{,}0x10^6$ 445	Test Frequenz 10 Hz Lower Load 7 N/mm² Upper Load N/mm² 590 620 650 680 680 680 745 745
Linear Shrinkage during Cure	ASTM D 2566	cm/cm	0,0015	
Pot Life			at 25°C at 50°C	30 min. 10 min.
Cure Time for Various Cure - Temperatures			47 h 48 h 28 h	Ambient Temp. 13°C 16°C 21°C
Flammability of Self-Supporting	ASTM D 635	Plastics	ATB 160 s AEB 20 mm	
Shelf Life		Months	18	

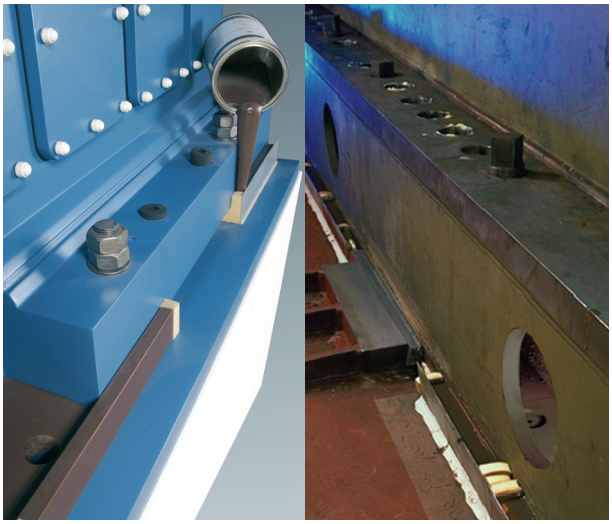
TYPE:
EPOCAST 36® in units of 2,0 ltr.and 4,0 ltr.
1 unit = resin + hardener

HEAT RESISTANCE:
From -100°C to +80°C (constant load)

WORKING TEMPERATURE:
From 13°C to 50°C

NOISE ABSORBATION:
Due to existing mounting conditions between 5-7 dB. lin.

VIBRATION ABSORBATION:
Vibrations - compared to steel chocks - decrease conspicuously depending on force-fit foundation /- Percentage contact area of resin chock 100%



All data and statements made herein are based upon laboratory tests and field experiences, but are made without any representation or guaranty of accuracy. Our products are sold on the conditions that the user himself will evaluate them to determine their suitability for his own purpose before adoption.

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