Technical Data Sheet

FUTUREWAY® EN-4S

Potting heat insulation adhesive

FUTUREWAY® EN-4S is a 2-component liquid silicone rubber which cures at room temperature. The silicone system contains no solvents or plasticizers.

Features & Benefits

- High flow behavior
- Useful temperature range -50°C to +200 °C
- Good tightness to aqueous media
- Good UV resistance
- Low water absorption
- Good mechanical resistance
- Good chemical resistance
- Good low temperature flexibility
- Excellent ultra high temperature heat insulation capability

Typical Applications

- 2-component liquid silicone rubber for potting

Processing

- Processing generally takes place using 2-component mixing and metering systems. The material must be homogenized by gentle stirring in the supply vessels
- The material surfaces must be kept clear of platinum catalyst poisons such as sulfur, amine, phosphorus, chlorine and tin compounds
- Flawless silicone curing must be confirmed in advance by testing
- Small quantities of hydrogen are created during the reactive time

Curing

After mixing the A+B components, curing takes place at room temperature. A few minutes at 50-80°C causes a tack free surface of the silicone and shortened assembly time. If a low compression set is needed the gasket should be cured for 20-30 minutes at the maximum exposure temperature.

Statement: The information contained in this date sheet is intended to assist you in the design of Futureway materials. It is not intended to and does not create any explicit or implicit guaranties, including any guaranty of marketability of the goods and for special purposes. It is also not guaranteed that users can achieve the results shown in the technical specifications of this material in specific applications. They will change with different application situations, such as equipment type, environmental conditions, process conditions, etc. Users should determine the suitability of Futureway materials for each application.

Raw material data

	Unit	A component	B component
Color	-	White	Blue
Viscosity	cP	11000	9000
Density	g/cm^3	1.4	1.4
Processing data			
Processing temperature	°C	26	
Operating time	min	15	
Tack free time	min	60	

Characteristics (2mmT cured at 25°C@24h)

Property	Unit	Test Method	Typical Value
Physical			
Color	-	-	Blue
Hardness	Shore A	ISO 7619-1	55
Density	g/cm^3	ASTM D1056	1.4
Tensile strength	MPa	ASTM D412	2.3
Elongation	%	ASTM D412	100
Thermal			
Thermal Insulation (600˚C@5min)	˚C	Internal	160 (2mmT)
Thermal conductivity	W/(m·K)	ASTM C518	1.0

Supply vessels, standard sizes

Packaging vessels	Unit	A component	B component
Plastic hobbock	kg/bbl	20	20
Gum tube	g/tube	200	200

Usable Life & Storage In temperature stabilized room (5˚C~30˚C), original vessels may be stored for at least 6 months.

Occupational safety Professional Association safety regulations governing commercial hygiene in the handling of reactive resins and their hardeners must be adhered to. Please observe the relevant safety data sheets.

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