THERMAL INSULATION COATINGS TEGO[®] Therm HPG 4000, HPG 6806, L 300 New product group of high-performance grapules and best-resistant b

New product group of high-performance granules and heat-resistant binder for thermal insulation coatings



Market trends and requirements such as optimizing energy efficiency, improving the durability of components, and ensuring occupational safety when handling hot surfaces are increasing interest in new developments in the field of insulation coatings.

The new product group TEGO[®] Therm comprises three tailor-made products that enable the production of high-performance insulation coatings:

TEGO® Therm HPG 4000

are silica-based granules with superior low thermal conductivity, high hydrophobicity and reduced flammability.

TEGO[®] Therm HPG 6806

is a finer powder which also provides excellent insulation functionality, enhances mechanical performance and features smooth & even surfaces of insulation coating.

TEGO[®] Therm L 300

is a liquid waterborne silicone hybrid binder with excellent heat & mechanical stability. NEW



TEGO[®] Therm HPG 4000

- Particle size d_{50} ~300 μm
- Superinsulation properties
- High hydrophobicity



TEGO[®] Therm HPG 6806

- Particle size $d_{50} \sim 30 \ \mu m$
- Excellent insulation properties
- Less thickening and easy incorporation in coatings



TEGO[®] Therm L 300

- Liquid binder with solid content $\approx 50\%$
- Broad compatibility with acrylic emulsions
- Ambient film forming





Insulation Coatings based on TEGO[®] Therm components are easy to apply to all kinds of complex geometric shapes by time-saving spray application. The super insulation TEGO[®] Therm granules provide an outstanding low thermal conductivity characteristic, which significantly reduces the loss of energy. The coating also ensures personnel protection by reducing the surface temperature to an acceptable limit.

Guiding Formulation for waterborne Thermal Insulation Coating

Peak temperature	150°C	200°C	250°C
TYPE OF COATING		ACRYLIC + SILICONE	
DRYING/CURING MECHANISM	AMBIENT DRYING	AMBIENT DRYING AND CURING AT HIGHER TEMPERATURES	
TEGO® Therm L 300	_	40	50
Acrylic Resin (e.g. MOWILITH° LDM 6119)	60	20	10
Polyvinyl alcohol sol., 20% in demin. water (e.g. Kuraray Poval™ 3–80, 3–83)	12	12	12
Water, demineralized	3	3	3
TEGO [®] Therm HPG 4000	15	15	15
TEGO® Therm HPG 6806	10	10	10
Total	100	100	100

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EVONIK OPERATIONS GMBH Goldschmidtstraße 100 45127 Essen Germany Phone +49 201 173-2222 Fax +49 201 173-1939 coating-additives@evonik.com www.coating-additives.com

