Technical Data Sheet

COOL BARRIER ETH ZR



Product description

This is two component moisture curing inorganic zinc ethyl silicate, very high zinc dust containing anticorrosive product. Designed for protection in severe corrosive environments. Suitable in approved coating systems.

Typical use

Suitable for structural steel and piping to be exposed to highly corrosive environments, C5I or C5M (ISO 12944-2). Recommended for offshore environments, refineries, power plants, bridges, buildings, mining equipment and general structural steel. Specially designed as a primer in coating systems where extended durability is required.

Colours

grey

Product data

Property	Test/Standard	Description
Solids by volume	ISO 3233	67 ± 2 %
Gloss level (GU 60 °)	ISO 2813	matt (0-35)
Flash point	ISO 3679 Method 1	15 °C
VOC-EUIED (2010/75/EU) (calculated)		510 g/l

The provided data is typical for factory produced products, subject to slight variation depending on colour. All data is valid for mixed paint. Gloss description: According to Abolin Performance Coatings' definition.

Film thickness per coat

Typical recommended specification range

Dry film thickness	50 - 90 microns
Wet Film Thickness	75 - 125 microns
Theoretical Speeding Rate	13,4 - 7,4 m²/l

Surface preparation

To secure lasting adhesion to the subsequent product all surfaces shall be clean, dry and free from any contamination.

Surface preparation summary table

Substrate	Surface preparation		
	Minimum	Recommended	
Carbon	Sa 2½ (ISO 8501-1) with a surface	Sa 2½ (ISO 8501-1) with a surface	
steel	profile Fine to Medium G (ISO 8503-2)	profile Fine to Medium G (ISO 8503-2)	

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Application

Application methods

Spray: Use air spray or airless spray.

Brush: Recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness. In order to avoid settling of heavy zinc, continuous mechanical stirring during application is recommended.

Product mixing ratio (by volume)

COOL BARRIER ETH ZR Comp A 4 part(s)
COOL BARRIER ETH ZR Comp B 1,2 part(s)

Thinner/Cleaning solvent

Thinner: Abolin Thinner No. 5

Guiding data for airless spray

Nozzle tip (inch/1000): Pressure at nozzle (minimum): 17-21 100 bar/1400 psi

Drying and Curing time

Substrate temperature	10 °C	23 °C	40 °C
Surface (touch) dry	30 h	15 h	10 h
Walk-on-dry	45 min	30 min	25 min
Dry to over coat, minimum	15 h	5 h	2 h
Dried/cured for service	15 h	5 h	2 h

Drying and curing times are determined under controlled temperatures and relative humidity below 85 %, and at average of the DFT range for the product. Surface (touch) dry: The state of drying when slight pressure with a finger does not leave an imprint or reveal tackiness. Walk-on-dry: Minimum time before the coating can tolerate normal foot traffic without permanent marks, imprints or other physical damage. Dry to over coat, minimum: The shortest time allowed before the next coat can be applied. Dried/cured for service: Minimum time before the coating can be permanently exposed to the intended environment/medium.

Induction time and Pot life

Paint temperature 23 °C

Pot life 6 h

Heat resistance

Dry, atmospheric

Temperature

Continuous Peak 400 °C 500 °C

Peak temperature duration max. 1 hour.

The temperatures listed relate to retention of protective properties. Aesthetic properties may suffer at these temperatures. This product can withstand a peak temperature of 500 °C for a longer period as well. A continuous temperature above 400 °C will however affect the long term performance of an inorganic zinc silicate coating.

Product compatibility

Depending on the actual exposure of the coating system, various primers and topcoats can be used in combination with this product. Some examples are shown below. Contact Abolin for specific system recommendation.

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Previous coat: zinc epoxy, zinc silicate Subsequent coat: epoxy, silicone acrylic

Packaging (typical)

	Volume	Size of containers	
	(litres)	(litres)	
CB EZR Comp A	8	10	
CB EZR Comp B	2,5	20	

The volume stated is for factory made colours. Note that local variants in pack size and filled volumes can vary due to local regulations.

Storage

The product must be stored in accordance with national regulations. Keep the containers in a dry, cool, well ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

Shelf life at 23 °C

CB EZR Comp A: 6 month(s)
CB EZR Comp B: 24 month(s)

In some markets commercial shelf life can be dictated shorter by local legislation. The above is minimum shelf life, thereafter the paint quality is subject to re-inspection.

Caution

This product is for professional use only. The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to Abolin's technical documentation. Applicators and operators shall use appropriate personal protection equipment when using this product. This guideline is given based on the current knowledge of the product. Any suggested deviation to suit the site conditions shall be forwarded to the responsible Abolin representative for approval before commencing the work.

Health and safety

Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not inhale spray mist. Avoid skin contact. Spillage on the skin should immediately be removed with suitable cleanser, soap and water. Eyes should be well flushed with water and medical attention sought immediately.

Colour variation

When applicable, products primarily meant for use as primers may have slight colour variations from batch to batch. Such products may fade and chalk when exposed to sunlight and weathering.

Disclaimer

The information in this document is given to the best of Abolin's knowledge, based on laboratory testing and practical experience. Abolin's products are considered as semi-finished goods and as such, products are often used under conditions beyond Abolin's control. Abolin cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Abolin reserves the right to change the given data without further notice. Users should always consult Abolin for specific guidance on the general suitability of this product for their needs and specific application practices. If there is any inconsistency between different language issues of this document, the English version will prevail.

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