Technical Information Page



Product presentation

Knarr Zinkomastik Topcaot is a two-component, polyamide-cured epoxy paint. It is resistant to impact and mechanical effects and has a bright appearance. Designed for use as a final layer on metal surfaces.

Surfaces to be used

It can be used on steel structures and metal surfaces where corrosion resistance according to C4 (ISO 12944-2) standard is needed. It is especially recommended to paint metal structures of production facilities, warehouses, bridges and buildings. The painted surface should not be exposed to direct sunlight.

Film thickness and theoretical diffusion area

	Minimum	Maximum	Recommended
Film thickness, dry (μm)	50	150	60
Film thickness, wet (μm)	93	277	111
Theoretical diffusion area (m ² /l)	10.8	3.6	9

Physical properties

,		
Color		Ral colors
Solid content	ASTM D2697-03	54%±2 (by volume)
Density (gr/sm³)	ASTM D1475-13	1.42±0.02
Viscosity (25°C) KU	ASTM D562-10	100±5
Ignition degree	ISO 3679	25°C±2
Brightness (GU 60°C)	ASTM D523-14	Gloss (70-100)
Mixing life (23°C)		5-6 hours
Mixing ratio (by mass)		4 units A Comp., 1 unit B Comp.
Thinner		Must be thinned with 5-10% epoxy thinner.
Heat resistance		Up to 120°C (1 hour at 140°C max)

All results are mixed (A+B) and may have slight color differences.

Surface preparation

Steel - Blast Cleaning

All surfaces should be clean, dry and free from contamination. Surfaces should be treated in accordance with ISO 8504:2000.

All edges shall be ground to a minimum radius of 2 mm. Remove weld spatter and smooth weld seams by using disc grinders, chipping hammers or other suitable power tools. Sharp edges, weld seams, corners and other areas that are likely to receive less dry film thickness than specified, should be stripe coated.

The surfaces shall be blast-cleaned to min. Sa 2% (ISO 8501-1:2007). The surface profile and the anchor pattern shall be between 40 μ m and 70 μ m.

Coated substrates

All surfaces should be clean, dry and free from contamination. Surfaces should be treated in accordance with ISO 8504:2000.

"CMT Group" LLC

Address: Badamdar Highway 27, Baku, Azerbaijan



Technical Information Page



Ensure compatibility of the coated substrates with the selected paint system. If the remaining part of the existing coating system needs to be sweep-blasted, fine abrasive shall be used to avoid damage to the coating system.

When recoating aged coated substrates, damaged areas must be removed back to a firm edge. Light abrade or sweep-blast the surface in order to provide a physical key for adhesion.

When recoating zinc primed products, ensure the primer has been fully cured. Zinc salts products shall be removed by high pressure fresh water cleaning.

Contact "CMT GROUP" for more information.

Application

Mixing

The product is supplied in 2 containers as a unit. Always mix a complete unit in the proportions supplied. Do not mix more material than can be used within the specified pot life.

- Stir the base (Part A) with a clean mechanical mixer.
- Then add the entire contents of Curing Agent (Part B) and mix thoroughly.

Avoid too vigorous mixing as it leads to in air inclusion, which may result in poor application results. If thinner is required, only add after mixing of the two components.

Irrespective of the substrate temperature, the advised minimum temperature of the mixed paint is 15 °C. At lower temperatures, more thinner may be required to obtain a proper application viscosity, which may result in lower sag resistance and slower curing.

The temperature of the substrate should be at least 10°C and at least 3°C above the dew point of the air. Temperature and relative humidity should be measured in the vicinity of the substrate.

In general, the maximum recommended surface temperature is 40°C. Higher steel temperatures are acceptable provided dry-spray is avoided by proper spray application and extra thinning if required. In extreme cases it may be necessary to reduce film thickness in order to avoid sagging.

When applying the paint in confined spaces, provide adequate ventilation during application and drying. Observe local regulations. Please contact Contact "CMT GROUP" for a specific recommendation.

Application methods

Pressure at nozzle	120 – 180 bar
	Pressure at nozzle

Nozzle size 0.38 - 0.58 mmSpray angle 40 - 80 degress

Volume of thinner 0-3%

Guiding data Airspray Pressure at nozzle 3 - 5 bar

Nozzle size 1.2 - 1.5 mm

Volume of thinner 5-10%

"CMT Group" LLC

Address: Badamdar Highway 27, Baku, Azerbaijan



Technical Information Page



Brush/Roller Recommended for stripe coating and small areas. Care must be taken

into account to achieve the specified dry film thickness.

Thinner If thinning is necessary, this should be added after mixing of the two

components. The recommended level of thinner is dependent on thickness and conditions. In certain circumstances, it may be required to

exceed the stated level of thinner.

However, as a general rule do avoid excessive thinning as it will result in lower sag resistance and slower cure. In addition it may cause solvent entrapment, possibly risking blistering, pinholing and/or other coating

defects.

Film thickness

The paint must be applied as a continuous layer and as close to the specified wet film thickness as possible. Use a wet film thickness gauge to verify that the correct wet film thickness is applied.

Over application, excessive thinning, wrong application techniques etc. may lead to runs and sagging of the paint. When the paint is still wet, such effects can be rectified by brushing out the defected areas.

When the defect is noticed after curing of the paint, repair the affected areas by disc sanding to an even smooth surface and apply an additional coat of paint.

Stripe Coating

Stripe coating may be required to achieve the specified film thickness on specific areas such as edges, corners, weld seams etc. Use a round brush and ensure proper wetting of all areas. Avoid excessive application as it will lead to brush marks and may also result in air entrapment, which is detrimental to the paint's performance.

Additional usage instructions

Note to metallic colourshades.

The appearance of metallic colourshades in general will be dependent on application method, conditions, thickness, substrate type etc. For this reason, metallic shades cannot be made exactly according to colour code standards such as RAL, BS.

Drying time

Drying time mainly depends on the weather conditions, the thickness of the applied layer and the number of coats applied. The table below shows the approximate drying time of the paint depending on the air temperature.

- The room to be painted must be well ventilated (open air or free air circulation).
- Paint should be applied at the recommended thickness.
- The thickness must be applied taking into account the number of applied layers.

Air temperature10°C23°C40°CSurface drying4 hours2 hours1 hour

"CMT Group" LLC

Address: Badamdar Highway 27, Baku, Azerbaijan



Technical Information Page



The above information was obtained in accordance with the rules. Drying time may increase or decrease depending on film thickness, ventilation, surface painting system, painting operations, mechanical stability and amount of thinner added.

Product compatibility

The paint can be used with various primers and finishes. Some of them are shown below. For more accurate systems, it is recommended to contact our company:

Front coat: zinc epoxide, zinc silicate, epoxy, epoxy putty

Next layer: epoxy, polyurethane

Typical paint system

 $\begin{array}{lll} \text{Knarr Zinkomastik Primer} & 1 \text{ x } 100 \text{ } \mu\text{m} \\ \text{Knarr Zinkomastik HB MC} & 1 \text{ x } 75 \text{ } \mu\text{m} \\ \text{Knarr Zinkomastik Topcoat} & 1 \text{ x } 60 \text{ } \mu\text{m} \\ \end{array}$

Other systems may be determined by the scope.

Storage conditions

Paint should be stored in a dry, cool, well-ventilated, covered warehouse that is hot and non-sparking, subject to local conditions. It should be mixed well before use. Containers must be tightly closed. Shelf life (at 23°C) - 36 months.

Packing picture

It is produced as 16 KG Component A and 4 KG Component B.

Implementation operator

This product is intended for professional use. The applicator or operator must be experienced and knowledgeable about the product. The named person must mix and apply the paint according to the specification. Workers participating in the application must be provided with protective equipment.

Product color

There may be slight variations in product color from batch to batch. These types of products may have discoloration and chalking depending on atmospheric conditions and sunlight.

"CMT Group" LLC

Address: Badamdar Highway 27, Baku, Azerbaijan



Technical Information Page



Attention

The above information is based on results obtained from laboratory testing and field testing. In applications not under the control of the company, the responsibility for the quality of the paint lies solely with the company. It is not responsible for problems that may arise due to implementation and application errors.

Safety and health regulations

Follow the instructions on the container. Store in warehouses where there is no possibility of exposure to high temperatures and sparks. Use in well ventilated areas. In case of skin contact during use, wash with a suitable solvent and then with soap and water. In case of contact with eyes, rinse with plenty of water and seek medical advice if necessary.

NOTE: "CMT Group" LLC holds right to change information on this Technical Data Sheet without further notice.

"CMT Group" LLC

Address: Badamdar Highway 27, Baku, Azerbaijan

