

# INERTA MASTIC MIOX

## Epoxy coating

INERTA MASTIC MIOX is a two pack MIOX-pigmented epoxy paint with low solvent content. Grey and red colour contain aluminium pigment in addition to MIOX pigmentation.



Used for repairing existing coating systems on steel when environmental conditions do not allow blast-cleaning and for brush application when a dense coat is required in a single operation. The paint is also suitable for application in engineering shops.

Good adhesion to wire-brushed steel. Good resistance to chemicals and water. Provides good adhesion to top coats. For the product there is also available a WINTER-hardener INERTA MASTIC WINTER HARDENER, which is used when the painting is done in temperatures below +10°C.

The paint comes up to the specifications of Swedish Standard SSG 1021-GK.

## TECHNICAL DATA

<b>Certificates, approvals and classification</b>	SSG 1021-GK
<b>Recommended substrate</b>	Steel
<b>Binder</b>	Epoxy
<b>Solids</b>	INERTA MASTIC HARDENER 80 ±2 by volume INERTA MASTIC WINTER HARDENER 75 ±2 by volume
<b>Total mass of solids</b>	Approx. 1300 g/l
<b>Volatile organic compound (VOC)</b>	Approx. 210 g/l (DIRECTIVE 2010/75/EU) The VOC value provided is the average value for factory produced products, and consequently it will be subject to variations between individual products covered by this Technical Data Sheet.

<b>Theoretical spreading rate</b>	<b>Dry film (µm)</b>	<b>Wet film (µm)</b>	<b>Theoretical spreading rate (m<sup>2</sup>/l)</b>
	120	150	6.7 standard hardener
	120	160	6.3 WINTER-hardener
	160	200	5.0 standard hardener
	160	213	4.7 WINTER-hardener

As many of the paint's properties will change if too thick coats are applied, it is not recommended that the product is applied to a film thickness that is more than double of the thickest recommended film.

**Practical spreading rate** The values depend on the application technique, surface conditions, overspray, etc.

<b>Colours</b>	Grey, red and sandy. Grey and red colour contain aluminium pigment in addition to MIOX pigmenting.
<b>Gloss (60°)</b>	Semi-matt
<b>Mixing ratio (A:B)</b>	2:1 parts by volume
<b>Pot life, +23 °C</b>	2 h
<b>Thinner</b>	TEKNOSOLV 9506
<b>Storage</b>	The storage stability is shown on the label. Store in a cool place and in tightly closed containers.

## DIRECTION FOR USE

### Surface preparation

Remove from the surfaces any contaminants that might be detrimental to surface preparation and application. Remove also water-soluble salts by using appropriate methods. The surfaces are prepared according to the different materials as follows:

**STEEL SURFACES:** Remove mill scale and rust by blast cleaning to preparation grade Sa 2½ (standard ISO 8501-1). Roughening the surface of thin-plate improves the adhesion of the paint to the substrate.

**ZINC SURFACES:** Hot-dip-galvanized steel structures that are exposed to atmospheric corrosion can be painted if the surfaces are sweep blast-cleaned (SaS) till matt all over. Suitable cleaning agents are, e.g. aluminium oxide and natural sand. It is not recommended according to standard ISO 12944-5 to paint hot-dip-galvanized objects that are subjected to immersion strain. Painting of hot-dip-galvanized objects that are subjected to immersion strain must be discussed separately with Teknos.

If it is needed to paint zinc surfaces at low temperatures, we recommend using INERTA MASTIC WINTER-01 HARDENER as a hardener.

**OLD PAINTED SURFACES SUITABLE FOR OVERCOATING:** Any impurities that might be detrimental to the application of paint (e.g. grease and salts) are removed. The surfaces must be dry and clean. Old, painted surfaces that have exceeded the maximum overcoating time are to be roughened as well. Damaged parts are prepared in accordance with the requirements of the substrate and the maintenance coating. From the bare steel surfaces the rust is removed to preparation grade at least St 2 (ISO 8501-1).

An alternative method to dry cleaning is high-pressure water jetting with a pressure of over 70 MPa. This water-jetting can be used on intact, well adhering paint coats and/or on steel. After the water jetting the intact paint coats must have a rough surface structure. The cleanliness of the steel surface must be Wa

2 (ISO 8501-4:2006) or according to the specification. A flash-rust degree of maximum M (ISO 8501-4:2006) is allowed before application.

The place and time of the preparation are to be chosen so that the prepared surface will not get dirty or damp before the subsequent treatment.

Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.

Prefabrication primer: KORRO E Epoxy, KORRO SE Zinc Epoxy and KORRO SS Zinc Silicate Prefabrication Primers can be used, when required.

#### **Application method**

Airless spraying, Paint brush, Roller

#### **Application**

**MIXING OF THE COMPONENTS:** Take into consideration the pot life of the mixture when estimating the amount to be mixed at a time. Before application the base and hardener are mixed in right proportion. Stir thoroughly down to the bottom of the vessel. Mixing by machine is recommended, for example a slow-rotating hand-drill equipped with a mixer. Inadequate stirring or incorrect mixing ratio results in imperfect curing and impaired film properties.

Apply by paint brush or roller. Airless spraying is possible for painting blast-cleaned steel. For MIOX-pigmented paint use spray nozzle 0.017 - 0.021" and filter 0.315 mm (50 mesh).

The product can also be used alone without a top coat.

#### **Application conditions**

The surface to be treated must be dry. During the application and drying period the temperature of the ambient air, the surface and the product shall be above +10°C and the relative air humidity below 80%. Additionally, the temperature of the surface to be treated and the product must be at least +3°C above the dew point of the ambient air.

When using INERTA MASTIC WINTER HARDENER the temperature of the ambient air and the surface to be painted shall be over -5°C. The temperature of the paint during mixing and application shall be above +15°C.

**Drying time** +23 °C / 50% RH (dry film 120 µm)

INERTA MASTIC HARDENER / INERTA MASTIC WINTER HARDENER

- dust free 4 h / 3 h (ISO 9117-3:2010)

- touch dry 6 h / 5 h (ISO 9117-5:2012)

- fully cured 7 d / 7 d

**Overcoatable**

Standard hardener						
surface temperature	by itself		by TEKNOPLAST HS 150 or TEKNOPLAST PRIMER 7		by TEKNODUR 0050	
	min.	max. *	min.	max. *	min.	max. *
+10 °C	1 d	4 months or extended**	1 d	18 months or extended**	1 d	14 d or extended**
+23 °C	6 h	4 months or extended**	6 h	18 months or extended**	6 h	14 d or extended**
WINTER hardener						
surface temperature	by itself		by TEKNOPLAST HS 150 or TEKNOPLAST PRIMER 7		by TEKNODUR 0050	
	min.	max. *	min.	max. *	min.	max. *
-5 °C	2 d	4 months or extended**	-	-	-	-
0 °C	28 h	4 months or extended**	-	-	-	-
+10 °C	16 h	4 months or extended**	16 h	18 months or extended**	16 h	4 months or extended**
+23 °C	4 h	4 months or extended**	4 h	18 months or extended**	4 h	4 months or extended**

When overcoating the product at low temperatures the lowest usability temperature of the top coat has to be checked from the appropriate Data sheet.

\* A completely clean surface is mandatory to ensure the best intercoat adhesion. If the maximum overcoating interval has been exceeded, the surface must be roughened before overcoating. Increase in film thickness and rise in the relative humidity of the air in the drying space slow down the drying process and effect the overcoating properties.

\*\* Maximum overcoating interval can be extended in certain circumstances. To determine if extended overcoating interval is applicable please consult Teknos representative in written form.

If some other top coats besides the ones mentioned above are used, please contact Teknos representative for overcoating recommendations.

**Cleaning**

TEKNOSOLV 9506. Wash the equipment immediately after use.

**HEALTH AND SAFETY**

**Safety and precaution measures**

See safety data sheet.

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