





Replaces K66222/07

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# External paint systems for above ground steel tanks

STATEMENT BY KIWA

With this product certificate, issued in accordance with the Kiwa Regulations for Certification, Kiwa declares that legitimate confidence exists that the products supplied by

# Zandleven Coatings B.V.

as specified in this product certificate and marked with the Kiwa®-mark in the manner as indicated in this product certificate may, on delivery, be relied upon to comply with Kiwa evaluation guideline BRL-K21012/01 "External paint systems for above ground steel tanks" dated 2011-10-15 inclusive amendment sheets dated 2012-02-10, 2013-04-01 and 2015-03-15.

The following paint systems are certified:

Paint system Type Kiwa C2B

Paint system Type Kiwa C3A

Paint system Type Kiwa C3F

Paint system Type Kiwa C3G

Paint system Type Kiwa C4A

Paint system Type Kiwa C4E

Paint system Type Kiwa C4K

Paint system Type Kiwa C5E

Paint system Type Kiwa C5L

Ron Scheepers

Kiwa

Publication of this certificate is allowed.

Advice: consult www.kiwa.nl in order to ensure that this certificate is still valid.

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Certification process consists of initial and regular assessment of:

- quality system
- product

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# External paint systems for above ground steel tanks

#### **TECHNICAL SPECIFICATION**

Exterior paint system, in accordance with evaluation guideline BRL-K21012/01 "External paint systems for above ground steel tanks" dated 2011-10-15, including amendment sheets dated 2012-02-10, 2013-04-01 and 2015-03-15.

The aforementioned paint systems have a life expectancy of at least 15 years (= "High") as stated in NEN-EN-ISO 12944-5. The listed corrosion categories are according to NEN-EN-ISO 12944-2.

#### **APPLICATION AND USE**

The products are intended to be used as an external paint system for above ground steel storage tanks.

The paint system is suitable for use in the following corrosion areas, assuming that a paint system suitable for a heavier corrosion area is automatically suitable for use in a lower corrosion area.

#### Corrosion area C2

Type Kiwa C2B paint system consists of the following layers:

- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 100 µm in 1 layer
- Nominal dry film thickness of the total paint system is 100  $\mu m$ .

The repair of the paint system Type Kiwa C2B can be carried out by means of the following products:

- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 100 μm in 1 layer
- Nominal dry film thickness of the total paint system is 100 μm.

#### Corrosion area C3

Type Kiwa C3A paint system consists of the following layers:

- Primer type Acraton HS-U (C8) with a nominal layer thickness of 95 μm in 1 layer
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal thickness of 85 μm in 1 layer
- $\bullet$   $\;$  Nominal dry film thickness of the total paint system is 180  $\mu m.$

The repair of the paint system Type Kiwa C3A can be carried out by means of the following products:

- Primer type Acraton HS-U (C8) with a nominal layer thickness of 95 μm in 1 or 2 layers
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 85 μm in 1 layer
- $\bullet$   $\;\;$  Nominal dry film thickness of the total paint system is 180  $\mu m.$

### Type Kiwa C3F paint system consists of the following layers:

- Primer type Monopox LG Microzink (C54) with a nominal layer thickness of 50 µm in 1 layer
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 90 µm in 1 layer
- Nominal dry film thickness of the total paint system is 140 μm.

The repair of the paint system Type Kiwa C3F can be carried out by means of the following products:

- Primer type Monopox LG Microzink (C54) with a nominal layer thickness of 50 μm in 1 or 2 layers
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 90 μm in 1 layer
- Nominal dry film thickness of the total paint system is 140 μm.

#### Type Kiwa C3G paint system consists of the following layers:

- Primer type Acraton ST-LT (C47) with a nominal layer thickness of 100 μm in 1 layer
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 60 μm in 1 layer
- Nominal dry film thickness of the total paint system is 160 μm.

The repair of the paint system Type Kiwa C3G can be carried out by means of the following products:

- Primer type Acraton ST-LT (C47) with a nominal layer thickness of 100 µm in 1 or 2 layers
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 60 μm in 1 layer
- $\bullet$   $\;\;$  Nominal dry film thickness of the total paint system is 160  $\mu m.$

#### Corrosion area C4

Type Kiwa C4A paint system consists of the following layers:

- $\bullet~$  Primer type Monopox ZF Universal (C22) with a nominal layer thickness of 70  $\mu m$  in 1 layer
- Between layer type Acraton HS-U (C8) with a nominal layer thickness of 115 μm in 1 layer
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 55 μm in 1 layer
- Nominal dry film thickness of the total paint system is 240 μm.

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The repair of the paint system Type Kiwa C4A can be carried out by means of the following products:

- Primer type Monopox ZF Universal (C22) with a nominal layer thickness of 70 μm in 1 layer
- Between layer type Acraton HS-U (C8) with a nominal layer thickness of 115 μm in 1 or 2 layers
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 55 µm in 1 layer
- $\bullet$   $\;$  Nominal dry film thickness of the total paint system is 240  $\mu m.$

#### Type Kiwa C4E paint system consists of the following layers:

- Primer type Polyfinish MC Zinc-HS (C46) with a nominal layer thickness of 60 μm in 1 layer
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 80 µm in 1 layer
- Nominal dry film thickness of the total paint system is 140 μm.

The repair of the paint system Type Kiwa C4E can be carried out by means of the following products:

- Primer type Polyfinish MC Zinc-HS (C46) with a nominal layer thickness of 60 µm in 1 layer
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 80 μm in 1 layer
- Nominal dry film thickness of the total paint system is 140 μm.

#### Type Kiwa C4K paint system consists of the following layers:

- Primer type Acraton HS-U (C8) with a nominal layer thickness of 100 μm in 1 layer
- Between layer type Acraton HS-U (C8) with a nominal layer thickness of 110 μm in 1 layer
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 50 μm in 1 layer
- Nominal dry film thickness of the total paint system is 260 μm.

The repair of the paint system **Type Kiwa C4K** can be carried out by means of the following products:

- Primer type Acraton HS-U (C8) with a nominal layer thickness of 100 μm in 1 layer
- Between layer type Acraton HS-U (C8) with a nominal layer thickness of 110 µm in 1 or 2 layers
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 50 μm in 1 layer
- Nominal dry film thickness of the total paint system is 260 μm.

# Corrosion area C5-M/C5-I

Type Kiwa C5E paint system consists of the following layers:

- Primer type Polyfinish MC-Zinc HS (C46) with a nominal layer thickness of 60 μm in 1 layer
- Between layer type Monopox Metalsealer (2H4) with a nominal layer thickness of 100 μm in 1 layer
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 70 µm in 1 layer
- $\bullet$   $\;$  Nominal dry film thickness of the total paint system is 230  $\mu m.$

The repair of the paint system Type Kiwa C5E can be carried out by means of the following products:

- $\bullet$  Primer type Polyfinish MC-Zinc HS (C46) with a nominal layer thickness of 60  $\mu m$  in 1 layer
- Between layer type Monopox Metalsealer (2H4) with a nominal layer thickness of 100 μm in 1 layer
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 70 μm in 1 layer
- Nominal dry film thickness of the total paint system is 230 μm.

#### Type Kiwa C5L paint system consists of the following layers:

- Primer type zinc silicate ZL400-55 (C31) with a nominal layer thickness of 65 μm in 1 layer
- Between layer type Acraton Barrier (C49) with a nominal layer thickness of 120 μm in 1 layer
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 100 μm in 1 layer
- Nominal dry film thickness of the total paint system is 285  $\mu$ m.

The repair of the paint system Type Kiwa C5L can be carried out by means of the following products:

- Primer type zinc silicate ZL400-55 (C31) with a nominal layer thickness of 65 μm in 1 layer
- Between layer type Acraton Barrier (C49) with a nominal layer thickness of 120 µm in 1 or 2 layers
- Topcoat type Polyfinish HS 65 -55 (D35) with a nominal layer thickness of 100 μm in 1 or 2 layers
- Nominal layer thickness of the total paint system is 285 μm.

## MARKING

The products are characterized with the Kiwa brand.

Location of the mark: on the outside of the packaging, containers or bags.

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Mandatory designations:

- de shelf life of the product must be stated.
- Kiwa K66222
- factory name.

#### **RECOMMENDATIONS FOR CUSTOMERS**

Check at the time of delivery whether:

- the supplier has delivered in accordance with the agreement;
- the mark and the marking method are correct;
- the products show no visible defects as a result of transport etc.

If you should reject a product on the basis of the above, please contact:

Zandleven Coatings B.V.

and, if necessary:

Kiwa Nederland B.V.

Consult the supplier's processing guidelines for the proper storage and transport methods.