

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Shop Primers**

with type designation(s)
SigmaWeld 190

Issued to

**PPG Coatings Europe B.V. Protective & Marine Coatings
AMSTERDAM, Netherlands**

is found to comply with

**DNV GL class programme DNVGL-CP-0109 – Type approval – Shop primers for corrosion
protection of steel plates and sections**

Application :

The shop primer is approved for application on blast cleaned steel plates and sections.

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed
by DNV GL.**

This Certificate is valid until **2021-12-11**.

Issued at **Høvik** on **2016-12-12**

DNV GL local station: **Rotterdam**

Approval Engineer: **Gisle Hersvik**

for **DNV GL**

**Martin Strande
Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Job Id:
Certificate No: **TAK00000KC**

Product description

SigmaWeld 190; two component moisture curing, (ethyl) silicate prefabrication primer.

Manufactured by

PPG Coatings SPRL/BVBA, Tweemontstraat 104, Deurne, 2100, Belgium.

DNV GL Local Office: Antwerp

Responsibility

The Company (stated on the front page of this Certificate) takes the responsibility that both design and production are in compliance with Rules, Standards and/or Regulations listed on page 1 of this certificate.

Application/Limitation

The shopprimer is approved for application on blast cleaned steel plates and sections.

The approval test does not include any examination of possible effects of welding with this primer on the welder's state of health.

This approval verifies only that the shopprimer tested has no detrimental effect on the finished weld, it is presumed that the film thickness applied is in accordance with the manufacturer's recommendation.

Type Approval documentation Tests carried out

Type Testing carried out according **Type Approval documentation**, according to DVS-Guideline 0501, Report No. 95 34 043/1 dated 19th December 1995, with result:

- Mean pore area 8,9 mm² (max. allowed pore area 125 mm²).

Marking of product

Product shall be marked with *manufacturer's name*; **PPG Coatings SPRL/BVBA, Deurne, Belgium** and *type designation*; **SigmaWeld 190**.

The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the DNV GL Type Approval Certificate.

Periodical assessment

The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

Periodical Assessment to be performed after 2 and 3.5 years (Certificate Retention) and at renewal after 5 years (Certificate Renewal).

The main elements of the Periodical Assessment are to:

- Ensure that **Type Approval documentation** is available.
- Review design, materials, production process, and performance with respect to possible changes, in order to ensure compliance with **Type Approval documentation** and/or referenced material specifications.
- Ensure traceability between manufacturer's product marking and DNV GL Type Approval Certificate.



Job Id:
Certificate No: **TAK00000KC**

END OF CERTIFICATE