

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Polyester Resins**

with type designation(s)

Synthopan® 960 including the variants; 960-71, 960 X-71, 960-72, 960 X-72, 960-73, 960 X-73, 960-74, 960 X-74, 960-75, 960 X-75, 960-76, 960 X-76

Issued to

**Synthopol Chemie Dr. rer. pol. Koch GmbH & Co. KG
Buxtehude, Germany**

is found to comply with

**Det Norske Veritas' Rules for Classification of High Speed, Light Craft and Naval Surface Craft,
Grade 2****Det Norske Veritas Standards' for Certification No. 2.21, Craft, 2010****Application :****For use in marine vessels according to stated Rules/Standards.**This Certificate is valid until **2018-12-31**.Issued at **Høvik** on **2014-10-24**DNV GL local station: **Hamburg**Approval Engineer: **Helene Bjerke**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. If any person suffers loss or damage which is proven to have been caused by any negligent act or omission of the Society, then the Society shall pay compensation to such person for his proven direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question. The maximum compensation shall never exceed USD 2 million. In this provision the "Society" shall mean DNV GL AS as well as all its direct and indirect owners, affiliates, subsidiaries, directors, officers, employees, agents and any other person or entity acting on behalf of DNV GL AS.

Certificate No: **K-6139**
File No: **332.20**
Job Id: **262.1-010811-3**

Product description

Unsaturated orthophthalic LSE (Low Styrene Emission) polyester resins:

Synthopan® 960 including the variants;

Synthopan® 960-71, Synthopan® 960 X-71, Synthopan® 960-72, Synthopan® 960 X-72, Synthopan® 960-73,

Synthopan® 960 X-73, Synthopan® 960-74, Synthopan® 960 X-74, Synthopan® 960-75, Synthopan® 960 X-75,

Synthopan® 960-76, Synthopan® 960 X-76

X = Low exothermic reaction

Type Approval documentation

1. Previous Type Approval Certificate No. K-4477.
2. E-mail from DNV GL Hamburg of 2014-10-16, including Type Approval Assessment Report of 2014-10-16.

Tests carried out

Type Testing carried out according to **Type Approval documentation**.

Marking of product

Product shall be marked with *manufacturer's name*; **Synthopol Chemie Dr. rer. pol. Koch GmbH & Co. KG, Buxtehude, Germany** and *type designation*.

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.

Assessment to be performed after two (2) years (Certificate Retention) and at renewal after four (4) years (Certificate Renewal).

The main elements of the Periodical Assessment are:

- 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 the DNV GL Type Approval Certificate.

END OF CERTIFICATE