



Certificate no.:
TAK00002N0

TYPE APPROVAL CERTIFICATE

This is to certify:
that the Polyester Resins

with type designation(s)
SYNTEVEN 918,
SYNTEVEN 918 BB

issued to
GALSTAFF MULTIRESINE S.p.A.
Milano, MI, Italy

is found to comply with
DNV class programme DNV-CP-0083 – Type approval – Polyester resin, vinylester resin, gelcoat and topcoat

Application:
Grade 1 polyester resin for construction of laminates made of fibre reinforced plastics.

Issued at **Hamburg** on **2026-02-12**
This Certificate is valid until **2031-02-11**.
DNV local unit: **Italy/Malta CMC**
Approval Engineer: **Joachim Rehbein**

for **DNV**

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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

SYNTEVEN 918: Isophthalic-NPG unsaturated polyester resin dissolved in styrene

Hardener: 2% MEKP
Accelerator: 0.2% Co 6% Aliphatic Solvents

Approved variants:

SYNTEVEN 918 BB

Hardener: 2% MEKP
Accelerator: 0.2% Co 6% Aliphatic Solvents

The following indicative properties have been verified by type testing:

Property	Test Method	SYNTEVEN 918	SYNTEVEN 918 BB	Unit	Value ¹⁾
Tensile Strength	ISO 527-1,2	75	63	MPa	mean
Fracture Elongation	ISO 527-1,2	3.4	2.7	%	mean
Water Absorption	ISO 62	78	63	mg	mean
Heat Deflection Temperature	ISO 75-2, Method A	90	87	°C	mean
Barcol Hardness	ASTM D2583	36	43	-	mean
Density	ISO 1183-1	1.033	1.046	g/cm ³	mean
Curing procedure used for type testing: 24 hours at 23°C followed by 24 hours at 60°C					

Note:

1) mean – mean value of type test results

Application/Limitation

For use in the construction of FRP laminates, provided that the fibre reinforcement complies with the applicable DNV requirements and is compatible with the resin.

The approval covers the variants listed above.

Any significant changes in design and / or quality of the material will render the approval invalid.

Type Approval documentation

Tests carried out

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

Marking of product

Product shall be marked with *manufacturer's name, type designation, lot number, gross weight / Net weight and manufacturing date*.

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 Type Approval Certificate.

Assessed production site

Galstaff Multiresine S.p.A.
Via delle Groane, 126, 20024, Garbagnate Milanese (MI), Italy

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 assessments (for Certificate Retention / Certificate Renewal) shall be performed according to DNV-CP-0338.

This certificate is only valid if required Periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

END OF CERTIFICATE