

TECHNICAL DATA SHEET

Description: HN 800 TA 31 is a mixture of vinylester resin dissolved in styrene, thixotropic, preaccelerated and additivated with catalyst indicator.

The resin does not contain waxes or paraffin of any kind and does not therefore pose delamination problems. However, after 24 hours from setting, it is recommended to sand the coat to assure good interlaminar adhesion.

This resin has been approved by Lloyd's Register of Shipping.

Main fields of application: HN 800 TA 31 has been designed for all fibreglass sectors, and above all for boat and skin-coat building. HN 800 TA 31 can be applied either by manual stratification or spraying.

Advantages: The special chemical composition of the resin guarantees good compatibility and wettability with fibreglass and a good resistance to blistering.

The high reactivity of resin HN 800 TA 31 makes it possible to obtain a good degree of polymerisation in a short period of time.

The resin also has a low styrene content compared to conventional resins, with a consequent lower environmental impact during processing.

Main characteristics: Resin HN 800 TA 31 gives fibreglass-reinforced plastic good resistance to osmosis; it has a high HDT value, high resilience, good tensile elongation and excellent mechanical characteristics in general that make HN 800 TA 31 especially suitable for boat production and for PRFG production a good chemical resistance is required. The special thixotropic system guarantees the absence of thixotropic agent sedimentation.

Chemical and physical characteristics of liquid resin

Characteristics	Range	Unit	Method
Appearance	Cloudy liquid		
Viscosity @25°C (*)	450 - 550	mPa.s	I.O. 369
Thixotropic index	3,0 - 3,8		I.O. 369
Gel time @25°C(**)	27 - 35	minutes	I.O. 1000
Exothermal peak	155 - 175	°C	I.O. 1000
Gel to peak time	10 - 15	minutes	I.O. 1000
Styrene content	29 - 33	%	I.O. 349
Water content	Max 0,1	%	I.O. 360

(*)Brookfield RVF Spindle#3@60rpm

(**)Brookfield RVF Spindle#3@6/60rpm

(***) Curing conditions: 100 g resin + 1,25 g MEKP50

HPR *High performance resins*

Mechanical properties of cast unfilled resin(****) (typical values)

Property	Value	Unit	Method
HDT	105	°C	ASTM D 648
Tg	123	°C	DIN 53445
Tensile strength	81	MPa	ASTM D 638
Tensile E-modulus	4,1	GPa	ASTM D 638
Tensile elongation	2,7	%	ASTM D 638
Barcol hardness	48	----	ASTM 2583

(****)Curing conditions: 100 g resin+1,25 MEKP50
24 hours at room temperature + 2 hours at 100°C

Use

We recommend using the resin at temperatures of between 15°C and 30 °C. Using a blend of MEKP (standard reactivity Methyl Ethyl Ketone Peroxide) and AAP (acetyl acetone peroxide) enables shorter gel time with a higher exothermal peak. When manufacturing fibreglass-reinforced plastic requiring chemical resistance, before using resin HN 800 TA 35, we recommend contacting our technical assistance service.

Instructions before use

The resin must be conditioned to at least 15°C before use to obtain adequate catalysis when MEKP is used as a catalysis system.

Shake resin well before use.

Storage instructions

The resin must be stored in original, sealed and intact containers, in a dry place and at a temperature of between 5°C and 25 °C.

The product's stability decreases at high temperatures and the resin's properties may change during storage. The storage times of unsaturated resins diluted in styrene may be significantly decreased when the product is exposed to light. Store in a dark place, in non-transparent containers.

Properties of set pure liquid resin - Typical values

Stability at 65°C	Min. 6	days	I.O. 375
Storage stability	Min. 6	months	

Company Information

SIRCA S.p.A. has a quality system certified by DNV according to standard UNI EN ISO 9001/2008.

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The information contained in this datasheet is based on laboratory data and our experience. Gel time and rheological properties may change because of reactive nature of material. We believe this information to be reliable, however we cannot guarantee its applicability in your process. We decline all responsibility for events that may arise as a consequence of improper use of the product.

By accepting the products described herein, the user accepts the responsibility to thoroughly test any application before commencing production. Our advice should not be taken as encouragement to breach any patent, law, safety code or insurance regulation.