



## TECHNICAL DATA SHEET – DUCORIT® S8

Revised: 09/2018

The ultra high performance grout, Ducorit S8 is a pneumatically transferred product used for structural grouted connections in offshore wind turbine foundations and oil & gas installations

### PRODUCT DESCRIPTION

Ducorit S8 is a strong structural grout primarily used in offshore wind turbine foundations. Its ability to be transferred pneumatically enables extremely fast material transfers from dock to vessel as well as ground-breaking installation speed. Using Ducorit S8 does not require special precautions with respect to environmental hazards.

### INSTALLATION

Ducorit S8 is designed to provide superior mixing output rates to ensure optimized installation time and cost-effective grouting operations. The batch mixing architecture consistently delivers a uniform high-quality product. The solution features 100% mixing and pumping redundancy built-in, greatly reducing the risk of equipment downtime.

Please refer to the ITW Performance Polymers Method statement regarding specific installation requirements.

### FLOWABILITY

Ducorit S8 can be effectively pumped up to several hundred meters with as small as a 2-inch nominal bore. The enhanced flow and flow retention properties make it easy to pump in temperatures between 1 and 30°C.

### SUPPLY CHAIN

The unique composition of S8 allows the product to be delivered in bulk trucks as well as silos. Ducorit® S8 can be pneumatically transferred from one transport media to another. This ensures optimization of grout installation supply chains by greatly decreasing time in port for installation vessels.

Ducorit S8 can also be delivered in bulk bags from 25 kg to 2000 kg.

### DNV-GL CERTIFIED PROPERTIES

Maximum grain size	≤1 mm
Grout thickness (minimum)	30 mm
Grout thickness (maximum)	700 mm
Temperature range	1-30°C
Fresh grout density	2.22 to 2.31 kg/l
Characteristic strength (EN12390-3) 20°C	≥90 MPa
3 day strength (75mm cubes)	83.7 MPa
28 day strength (75mm cubes)	110 MPa
Flexural Strength (40x40x160mm prisms)	13.3 MPa
ASTM C230 Max. spread flow rate at 20°C	310 mm
Shrinkage (Autogenous ASTM C1698)	+ 0,29 mm/m (Positive expansion)
Yield	0.5 l/kg
Fatigue factor (DNV-OS-C502)	1.0 (In air) 0.95 (In water)
Static E-Modulus MPa (ASTM C469)	34.9 GPa
Poisson's ratio	0.20
Water content	Min. 14% Max. 15%

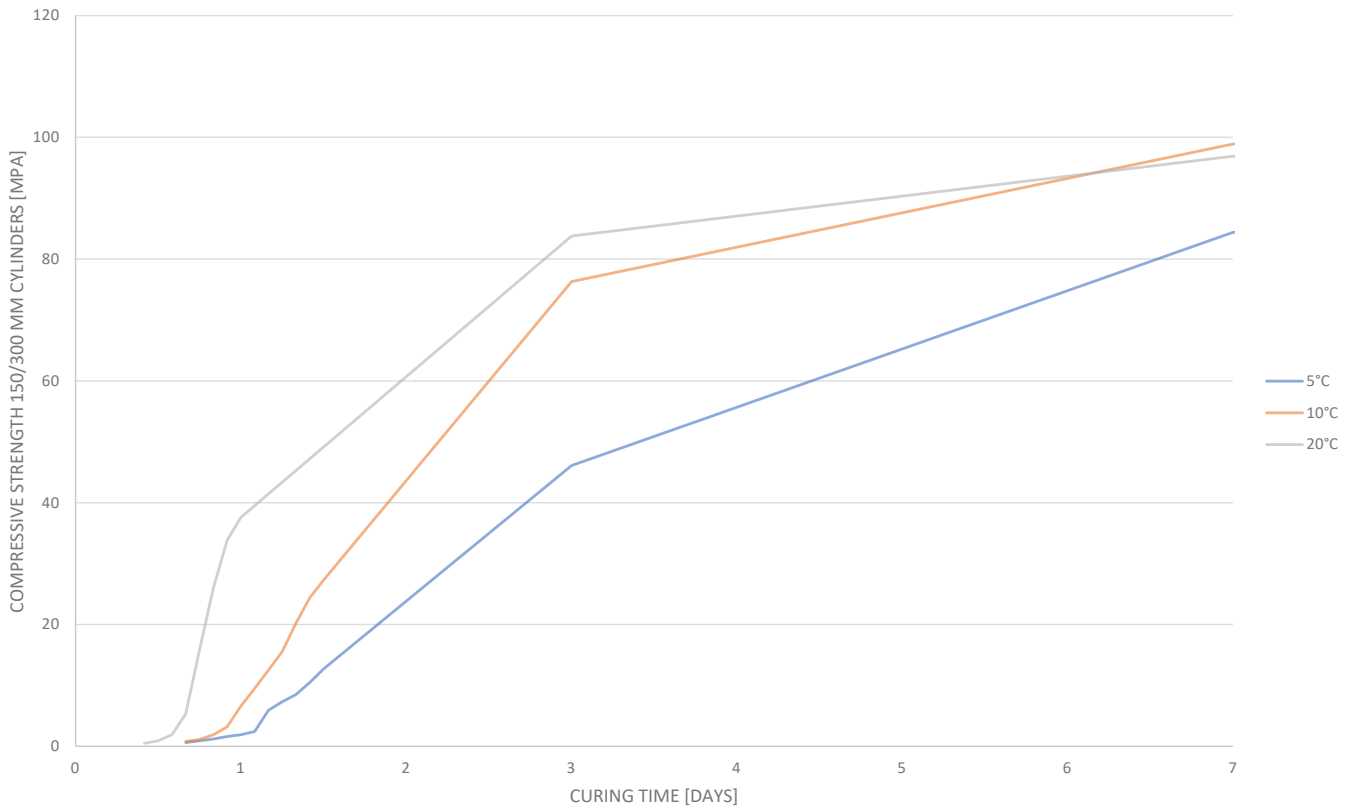
All data is from DNV-GL Certificate No: TAK00001BX  
The technical data does not represent guaranteed minima.



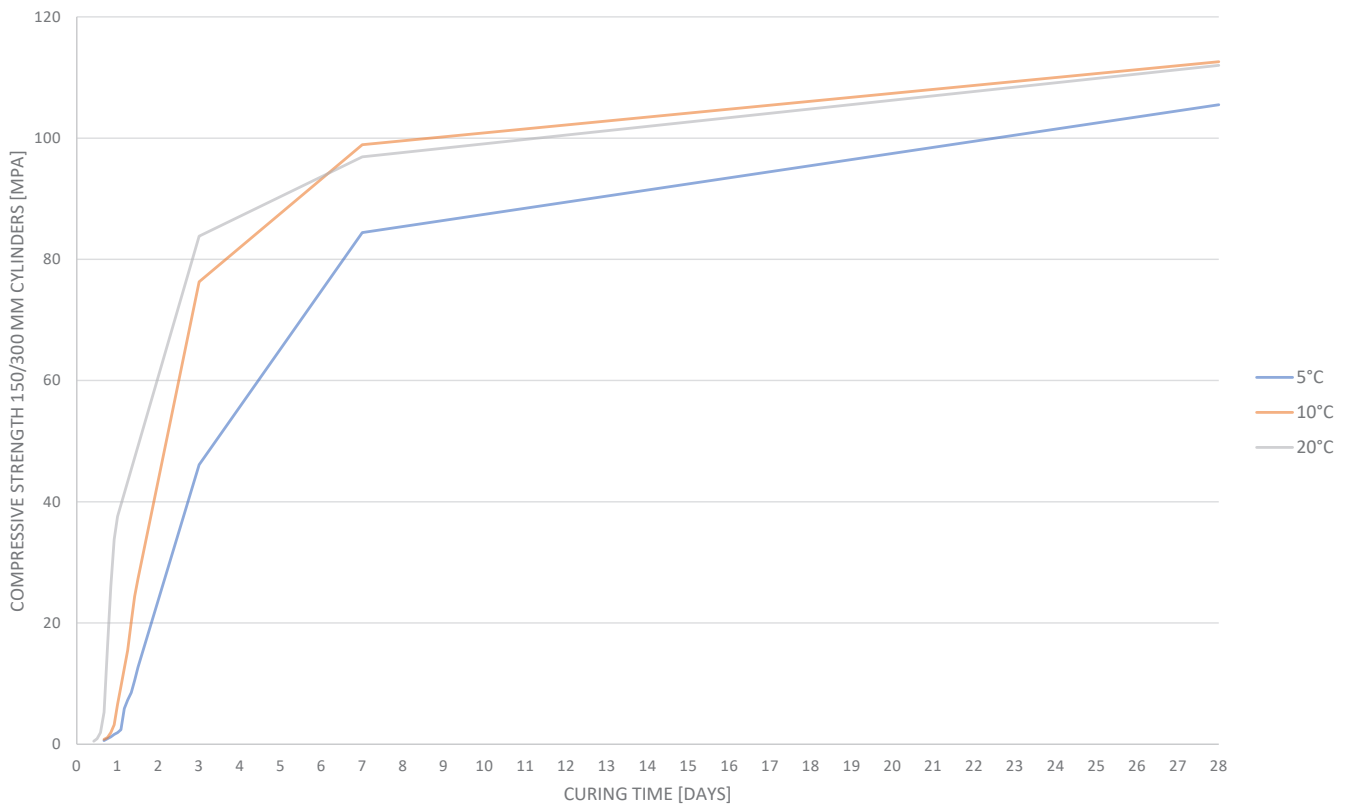
### STRENGTH DEVELOPMENT

The Ducorit S8 achieves a 28-day characteristic strength of 90 MPa. After 24 hours of curing in 20°C, the strength reaches approximately 30% of the long-term 28-day value. The outstanding fatigue resistance factor of 0.95 (in water) helps providing the required structural stability.

### Ducorit® S8 Early Strength Development



### Ducorit® S8 Strength Development



Strength curves are based on Test Report No. 18.2111-10, AMPA Kassel