

POLYQUENCH® 10-XN









DESCRIPTION

POLYQUENCH 10-XN is a water solution of an organic polymer, non-nitrite corrosion inhibitor, antifoam and biocide. The normal solubility of the polymer provides a wide temperature range of application. The quenching results are determined by the combined action of concentration, temperature and degree of agitation. Residue remaining on the as-quenched parts is lubricious in nature and readily water washable.

These physical properties make POLYQUENCH 10-XN a favourite choice for induction and flame hardening processes. The cooling speed of POLYQUENCH 10-XN is a bit faster than POLYQUENCH 15-XN using the same concentration level, making it more suitable for acquiring higher hardness results in lower alloyed Carbon steels.

OPERATING CONCENTRATION RANGE: 1 – 30% (by volume).

OPERATING TEMPERATURE RANGE: ambient - 90°C

OPERATING TIME: As required for appropriate metallurgical transformation

OPERATING EQUIPMENT:

All equipment for POLYQUENCH 10-XN baths may be constructed of mild steel.

AGITATION SPEED/VELOCITY: > 0,5 m/s

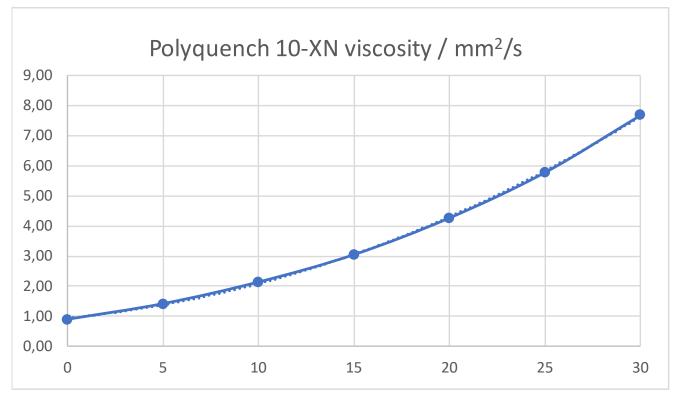
TYPICAL CHARACTERISTICS:

Test	Methods	Units	Grade
Appearance			Hazy colorless to
			amber colored liquid
Density @ 20°C	ASTM D1298	Kg/m³	1057
рН	ASTM E70		10,6
pH (15% sol.)	ASTM E70		10,4
Kinematic Viscosity @ 20°C	ASTM D445	mm²/s	195
Refractometer factor			2,8

Above figures are typical of those obtained with normal production tolerance and do not constitute a specification.



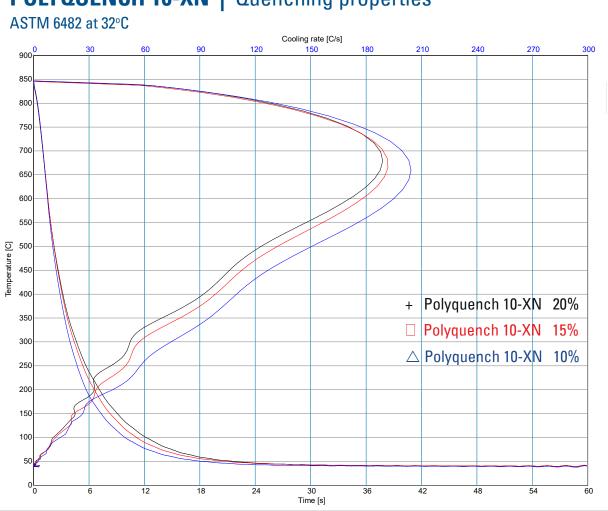
POLYQUENCH 10-XN | Concentration Control by Viscosity



Concentration % (v/v)

POLYQUENCH 10-XN | Quenching properties

Kinematic viscosity @ 25°C in mm²/s



CONTROL

Concentration:

The concentration of a POLYQUENCH 10-XN can be determined on site by measuring the refractive index using a hand held refractometer. The resultant reading has to be multiplied by the refractometer factor. Contaminants will influence the concentration determined by refractometer it is therefore recommended to measure the (kinematic) viscosity of a POLYQUENCH 10-XN solution regularly as well. The corresponding concentration can be read from above table.

SAFETY:

The Safety Data Sheet should be consulted for specific information and information on Health, Safety and Environment when handling this product.

HANDLING AND STORAGE

Protect from freezing, direct sun and store dry between 5 - 35°C in a well-ventilated area. Packaging types: 20, 200 and 1000 litre.

NON-WARRANTY

The information contained in this bulletin is believed by DuBois Chemicals to be accurate, genuine and complete. Recommended parameters are based on typical processes and may be altered to accommodate specific requirements. However, the final use of this product is beyond our control; therefore, no warranty of results is expressed or should be implied by this technical data sheet.



