



POLYQUENCH 15-XN

Aqueous Polymer Quenchant - IT'S NOT STICKY!®

DESCRIPTION:

POLYQUENCH 15-XN is a water solution of an organic polymer, non-nitrite corrosion inhibitor, 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 non-sticky, lubricious in nature and readily water washable. These physical properties make **POLYQUENCH 15-XN** a favorite choice for induction hardening processes.

TYPICAL PROPERTIES:

Appearance:	Clear, light amber liquid
Viscosity at 40°C:	190 cSt
Freezing Point:	-9 °C
Solubility:	Soluble in water (all proportions)
Specific Gravity:	1.05
pH:	9.5
Refractometer Factor:	3.5

USE INSTRUCTIONS:

Concentration:	1 – 30% by
Temperature:	Ambient – 60 °C
Agitation:	≥ 0.5 m/s recommended
Time:	As required for appropriate Metallurgical transformation

MATERIAL COMPATIBILITY:

All equipment for **POLYQUENCH 15-XN** baths may be constructed of mild steel.

CONCENTRATION CONTROL:

Shell Cup Test Method (Shell Cup #1)

1. Submerge the cup in the 80°F sediment and air free solution. Allow approximately 30 seconds for the cup to attain sample temperature.
2. Lift the cup vertically out of the solution, starting the stopwatch as the bottom of the cup breaks the surface.
3. Record the time required for the cup to empty, stopping the watch when the stream first breaks.
4. Read concentration from the plot of time (seconds) versus percent by volume concentration.

CORROSION CONTROL:

If for any reason the existing corrosion inhibitor in the quenchant does not provide adequate protection, the addition of a small amount of **RUST INHIBITOR XN** will reinforce the anticorrosion activity, without interfering with the quenching mechanism of the polymer solution.

RUST INHIBITOR XN is a liquid and is soluble in water. It is added to the quenching solution at a concentration of 2 - 3% (by volume) to provide a working pH of greater than 8.

SAFE HANDLING & STORAGE CONDITIONS:

Use **POLYQUENCH 15-XN** with adequate ventilation. Read the current Safety Data Sheet thoroughly before using this product.

DISPOSAL:

Any disposal of this product should be in compliance with all federal, state, and local regulations. Please refer to the Safety Data Sheet (SDS) for instructions regarding proper disposal of this product.

PRECAUTIONS:

KEEP OUT OF THE REACH OF CHILDREN.

Please refer to the label and Safety Data Sheet (SDS) for all warnings, recommendations for safety equipment, and other regulatory information. Copies of the SDS can be ordered by calling 800-438-2647.



This information is presented in good faith, but no warranty, expressed or implied is given. The final determination of the suitability of the products for the application contemplated by the user is the sole responsibility of the buyer. This is an uncontrolled copy and changes can be made to this document without notice.

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TIME VS. CONCENTRATION

NO. 1 SHELL CUP AT 80 F

