

TENAXOL™ QUENCH ULTRA 1500

POLYMERIC QUENCHANT

▷ PRODUCT DESCRIPTION

Tenaxol Quench Ultra 1500 is a nonflammable polymeric quenchant. It is an aqueous solution of a water soluble organic polymer that incorporates a corrosion inhibitor, antifoam, and biocide. This combination results in a homogenous solution.

Tenaxol Quench Ultra 1500 is formulated with a proprietary non-nitrite corrosion inhibitor that does not form nitrosamines. When hot metal is quenched in a diluted solution of Tenaxol Quench Ultra 1500 a film of organic polymer is deposited on the surface. The rate at which this metal is cooled is governed by the thickness of this polymer rich film. The thickness of this film is controlled by the concentration of the Tenaxol Quench Ultra 1500 in the quench bath. This film is fully water soluble at room temperature and does not result in a tacky, residual film.

▷ FEATURED BENEFITS

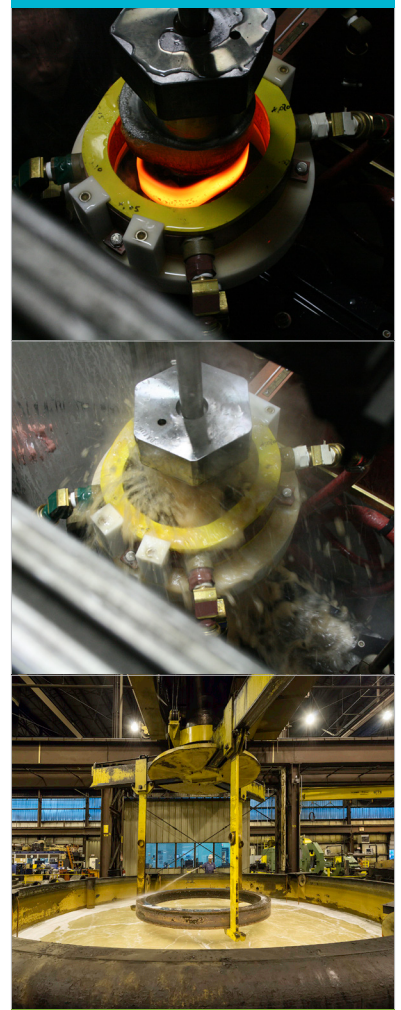
- Minimizes replacement control because of its low deterioration and/or oxidation rate. The major make-up requirement is for water loss due to evaporation.
- Eliminates smoke, soot and residues common to oil based quenchants. Equipment maintenance and plant cleanliness are easier to achieve and maintain.
- Completely water soluble and has a built-in bactericide to resist microbial infestation.
- Can be frozen and then thawed without performance loss.
- Not tacky and is easily removed by washing with water.
- Can be operated within a wide temperature range since the polymer employed is soluble and will not precipitate like other quenching polymers.
- Reduces drag-out of components because it is uniquely water soluble over a wide temperature range.

▷ PRODUCT APPLICATION

UCON Quenchant RL and RL-NN are suitable for:

- Tenaxol Quench Ultra 1500 is readily adaptable to induction and flame hardening, both spray quench and immersion, for items such as gears, crankshafts, camshafts and other intricate geometries and metallurgies.
- Tenaxol Quench Ultra 1500 may follow either oxidative or protective atmosphere furnaces of shake, pit rotary or continuous design. They may be utilized for continuous case quenching and for general hardening of forged and cast steels and cast irons.
- Tenaxol Quench Ultra 1500 is a proven quenching agent for wrought, cast, dip-brazed and forged aluminum alloys. Compared to water quenching Tenaxol Quench Ultra 1500 reduces residual stresses in aluminum alloys resulting in extensive straightening, potential cost savings and enhance uniformity of mechanical properties.

APPLICATION



TYPICAL APPLICATIONS

The heat treatment of carbon and alloy steels by flame, induction and submerged induction heating.

In batch and continuous furnace operations employing gas fired and carburizing-carbon-nitriding atmospheres.

With wrought, cast and forged aluminum alloys.



TENAXOL QUENCH ULTRA 1500

TECHNICAL DATA



TYPICAL PROPERTIES

Weight, 68°F (20°C)	8.8 – 9.2 lbs/gal.
Specific Gravity, 68°F (20°C)	1.056 – 1.100
Rust Inhibition, ASTM D 665A	Pass
Refractometer Multiplier	3.35
pH (concentrate)	9 – 11
Viscosity, 100°F	220 – 250 cSt

PRODUCT CODE

6811000000

HEALTH AND SAFETY

For health and safety guidance, please refer to the Chemtool SDS (Safety Data Sheets).



CUSTOM FORMULATED TECHNOLOGIES

A Subsidiary of Lubrizol

801 W Rockton Road, Rockton, IL 61072 | Phone: 815-957-4140 | Fax: 815-624-0292

www.chemtool.com

This information is presented in good faith, but no warranty, express or implied, is given nor is freedom from any patent owned by Chemtool Incorporated or by others to be inferred. The final determination of the suitability of the products for the application contemplated by the user is the sole responsibility of the buyer. REV 08/03/17