



LUBRITA POLYQUENCH 21 (POLYMER QUENCHANT)

Description:

LUBRITA POLYQUENCH 21 is a water soluble and non-flammable polymer quenchant for use in induction and flame hardening applications. Its Liquid Multi Chain Organic Polymer (PAG Base) fortified with organic rust inhibitor, biocide package and defoamer. They are easily dilutable with water to produce a quenchant which is instantly ready for use.

Lubrita Polyquench 21 has unique property of polymer separation at around 74 °C when heated. This separation and deposition of the film on the hot surface or parts controls the cooling rate. The rate of agitation, the temperature of the bath is the other factors which influence the cooling rate. By varying concentration of polyquench 21 in bath also vary the cooling rate.

Applications:

- **Lubrita Polyquench 21** can be used in both Flame hardening and Induction hardening applications (Easily adaptable by varying concentration)
- It can be used for hardening of forged components, heavy alloy parts, machined components including the treatments of many machine parts such as crankshafts, camshafts, half shafts, starter ring gears etc.
- The flexibility of quenching speed and uniform heat transfer characteristics of **Lubrita Polyquench 21** overcome many of the disadvantages of mineral oil or water based quenching system.
- **Lubrita Polyquench 21** eliminates steam pocket and high residual stress associated with water quenching.
- **Lubrita Polyquench 21** eliminates the smokes, fumes and fire hazards present during mineral oil quenching.

Features:

- Uniform hardness
- Elimination of soft spots.
- Elimination of quench cracks compared to water
- Reduced distortion unlike water quenching
- No corrosion on the machine parts like slides / bed / fixtures, etc.
- No fire hazard, freedom from pollution.
- Ease of cleaning and disposal.
- Reduced maintenance on heat exchanger / pipeline as polymer does not clog like oil.
- Frequency of quenching can be increased as the temperature rise per charge will be merely half that with oil because of higher specific heat of polymer.
- Consumption due to carry away loss will be less as polymer solution has a lower viscosity.

Material Compatibility:

Lubrita Polyquench 21 is compatible with all types of steel, cast iron(preferably a coat with an epoxy resin), Aluminium (Parts should be anodized, if possible).Its results are also satisfactory with brass and copper.

Lubrita Polyquench 21 is non compatible with lead, magnesium and zinc.

**Technical Properties:**

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Appearance	CLEAR,WATER WHITE
pH(Neat)	9.9
Specific Gravity	1.09
Viscosity (Neat)	320 cSt at 38 °C
Cloud Point	74 °C

PACK SIZES: 26KG (DRUM), 200KG (BARREL)**Warranty:**

Information given here is considered to be correct and is offered for your consideration, investigation and verifications. No warranty is offered or implied as our product usage is beyond our control.

(Release as on March 2021/Previous Data Replaced)**