# DuBois

# PARQUENCH® 90









#### **DESCRIPTION**

PARQUENCH® 90 is a unique water based polymer quenchant. It is far superior to oil in it's safety and working environment characteristics. Unlike polyalkylene glycols, PARQUENCH® 90 is completely water soluble at all concentrations and temperatures. It is non-flammable and provides desirable cooling characteristics, more reliable control in use and better economy. PARQUENCH® 90 can provide cooling rates at all stages of quenching that approximate those exhibited by fast quench oils. Consequently, those conditions necessary for achieving maximum hardness in steel with minimum distortion or cracking can be realized.

- OPERATING CONCENTRATION RANGE: 1 30% (by volume).
- MIX PREPARATION: Add the right amount of product into the tank already filled with water and agitate until a homogeneous mixture is obtained in the entire mix tank.
- OPERATING TEMPERATURE RANGE: ambient 90°C
- OPERATING TIME: As required for appropriate metallurgical transformation
- OPERATING EQUIPMENT:
  All equipment for PARQUENCH 90 baths may be constructed of mild steel.
- AGITATION SPEED/VELOCITY: > 0,5 m/s

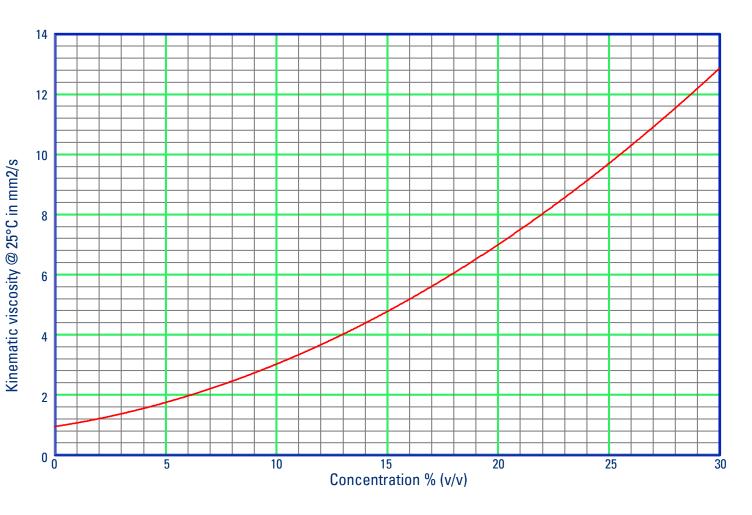
#### **TYPICAL CHARACTERISTICS:**

| Test                       | Methods     | Units | Grade              |
|----------------------------|-------------|-------|--------------------|
| Appearance                 |             |       | Transparent liquid |
| Density @ 20°C             | ASTM D 1298 | Kg/m3 | 1032               |
| рН                         | ASTM E70    |       | 10,5               |
| pH (15% sol)               | ASTM E70    |       | 10,4               |
| Kinematic Viscosity @ 20°C | ASTM D445   | mm2/s | 284                |
| Refractometer factor       |             |       | 5,0                |

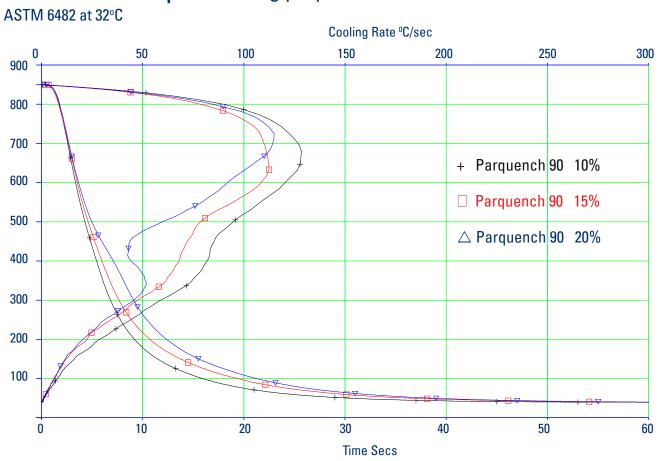
Above figures are typical of those obtained with normal production tolerance and do not constitute a specification.



## PARQUENCH 90 | Concentration Control by Viscosity



## PARQUENCH 90 | Quenching properties



#### **CONTROL**

#### Concentration:

The concentration of a PARQUENCH 90 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 PARQUENCH 90 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.



