

# AQUA-QUENCH 145

Advanced Bio-stable Polymer Quenchant for Induction Hardening Applications

## DESCRIPTION

Aqua-Quench 145 is an advanced bio-stable polymer quenchant designed for induction hardening and immersion quenching applications, and represents another breakthrough in technology from Houghton International.

## APPLICATION

Aqua-Quench 145 is a polymer quenchant formulated with a combination of ingredients that provide greater stability to microbial intrusion of the quenchant. Many of today's induction hardening applications require the use of polymer quenchants on a wide variety of parts. Unfortunately due to production requirements, parts may not be washed prior to heat treatment and pre-heat treatment process fluids such as machining coolants, rust preventives, and cleaners can contaminate the quench tank. These products can cause degradation of the quenchant.

Aqua-Quench 145 is specifically designed for use in induction and immersion hardening applications to minimize residual sticky deposits on equipment and quenched parts, and extend system life. The quenching speed of Aqua-Quench 145 solutions can be selected to suit the steel hardenability and components requirements by varying the concentration of the solution.

## DATA (TYPICAL VALUES)

<b>Appearance</b>	Clear to Slightly Hazy Fluid
<b>Kinematic Viscosity @ 100°F (37.8°C)</b>	120 cSt
<b>Specific Gravity @ 60°F (15.6°C)</b>	1.06
<b>pH</b>	10.3

Date | version  
Code

## FEATURES/ BENEFITS

- Bio-stable technology to extend system life, minimize recharging and increased production
- Designed for induction hardening applications: Minimizes residual sticky deposits on equipment and quenched parts provide cleaner operations and prevents blockage of spray nozzles and filters
- Water based quenchant to eliminate fire hazard and smoke associated with quenching oils along with cleaner parts and safer working environment
- Uniform quenching eliminates steam pockets and formation of soft spot associated with water quenching

## HEALTH AND SAFETY

Refer to MSDS for proper handling and disposal. Please note that the MSDS includes handling, health and disposal information which should be passed on to your employees, and to anyone else who comes in contact with our product. Additional advice can also be obtained from your local Houghton representative.

NOTE: Read and understand all precautions on container labels before using this product.



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This document contains information based on data that is believed to be correct. However, the product may not be applicable to all uses and operating environments. No warranty or guarantee is expressed or implied.

# COOLING CURVE ANALYSIS

By ivf quenchoest

## Aqua-Quench 145

QRS # 06\*5227

Date: 3/12/2010

### Test Parameters:

Sample Size - 1 liter

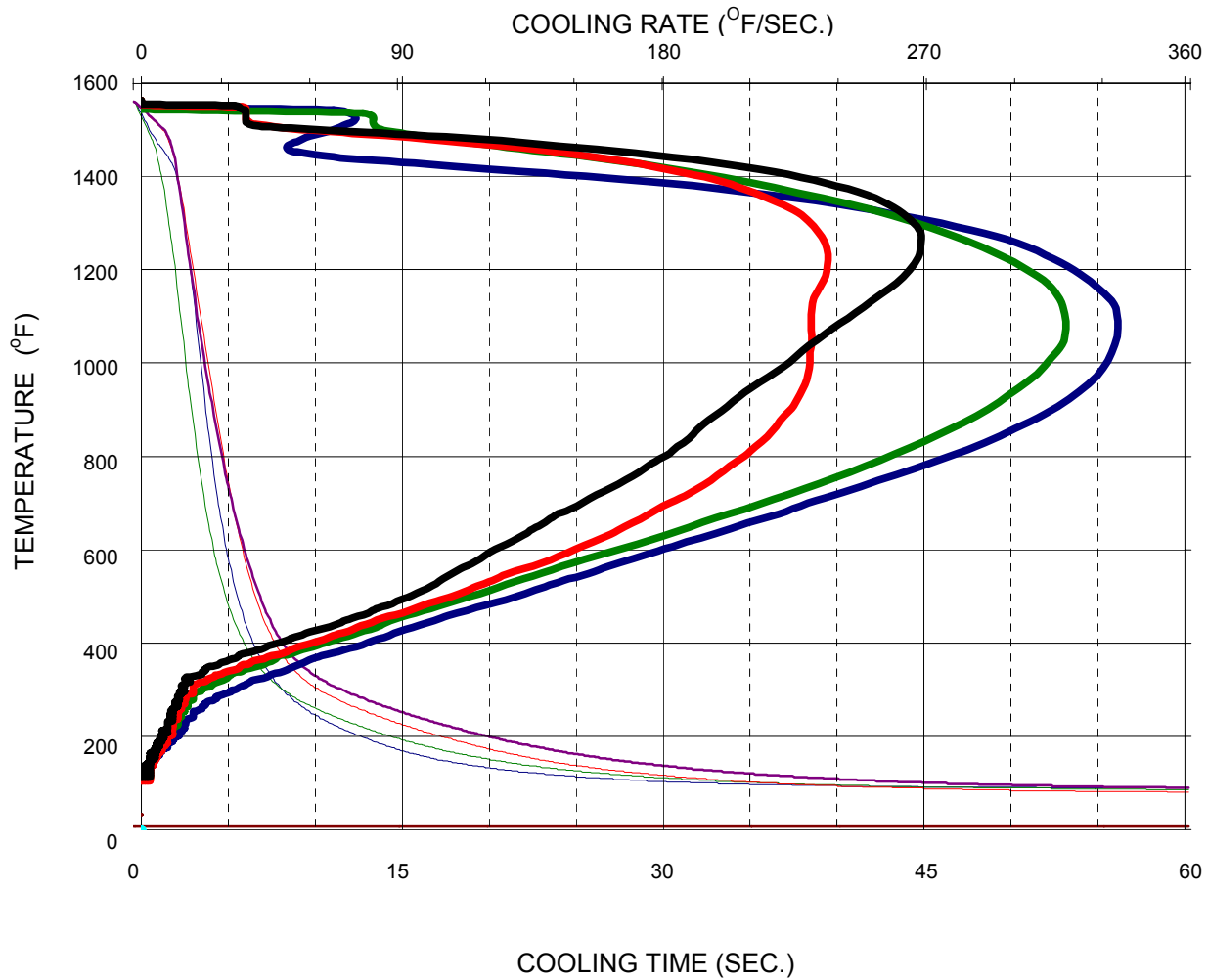
Bath Temp.- 100° F

Probe -IFHT Std. Inconel 600

Agitation-

Moderate

Sample #1-	Aqua-Quench 145	5%
Sample #2 -	Aqua-Quench 145	10%
Sample #3 -	Aqua-Quench 145	15%
Sample #4 -	Aqua-Quench 145	20%



### COMMENTS:

The oils tested show adequate quenching effects; i.e. similar to that of their control.

Tested according to Houghton International laboratory procedure Q03.