

# Aqua-Quench® 245

Advanced bio-stable polymer quenchant for induction and immersion hardening applications

## DESCRIPTION

**Aqua-Quench 245** is an advanced bio-stable polymer quenchant designed for induction hardening and immersion quenching applications, and represents another breakthrough in technology from Houghton International.

**Aqua-Quench 245** 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 245** 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 245** solutions can be selected to suit the steel hardenability and components requirements by varying the concentration of the solution.

## 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
- Uniform quenching eliminates steam pockets and formation of soft spot associated with water quenching
- Water based quenchant to eliminate fire hazard and smoke associated with quenching oils along with cleaner parts and safer working environment

## DATA (TYPICAL VALUES)

Appearance	Clear to Slightly Hazy Amber Fluid
Kinematic Viscosity @ 100°F (37.8°C)	195 cSt
Specific Gravity @ 60°F (15.6°C)	1.07
pH	10.3
Refractometer Factor	2.0

## HEALTH AND SAFETY

Refer to SDS for proper handling and disposal. Please note that the SDS 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.

CF 14.01 US



Houghton International Inc.  
 Madison and Van Buren Aves.  
 P. O. Box 930  
 Valley Forge, PA 19482-0930

Phone: 610-666-4000  
 Fax: 610-666-0174  
 info@houghtonintl.com  
 www.houghtonintl.com

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 245

QRS # 0

Date: 3/12/2010

### Test Parameters:

Sample Size - 1 liter

Bath Temp.- 100° F

Probe -IFHT Std. Inconel 600

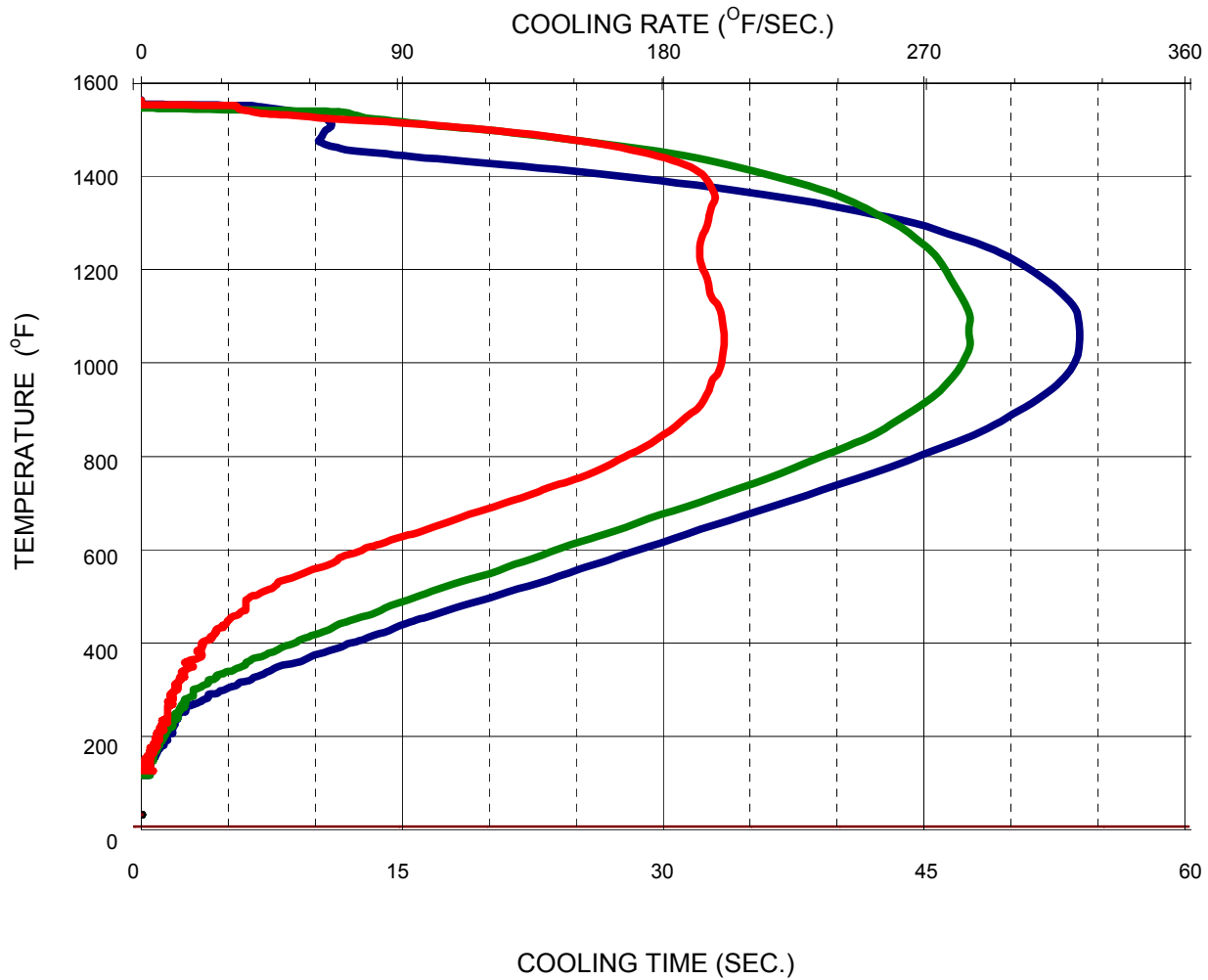
Agitation -

Moderate

**Sample #1-** Aqua-Quench 245 5%

**Sample #2 -** Aqua-Quench 245 10%

**Sample #3 -** Aqua-Quench 245 15%



### COMMENTS:

Tested according to Houghton International laboratory procedure Q03.