

AQUA-QUENCH 251

An Oil-Free, Non-Flammable, Water Soluble Synthetic Quenchant for the Hardening of Ferrous and Non-Ferrous Alloys

DESCRIPTION

Aqua-Quench 251 is an oil free, non-flammable, water soluble synthetic quenchant for the hardening of ferrous alloys and solution treatment of aluminum alloys.

APPLICATION

Aqua-Quench 251 is a versatile water soluble polymer quenchant for use in both ferrous and aluminum alloys.

Aqua-Quench 251 is used for the hardening of ferrous forgings, castings and stampings. It can be used in open quench tanks, continuous furnaces, and selective surface hardening equipment.

The flexibility of quenching speed and uniform heat transfer characteristics of Aqua-Quench 251 eliminates many of the disadvantages of water or mineral oil based quenchants.

Aqua-Quench 251 can also be used for the solution treatment of aluminum alloys. Aqua-Quench 251 complies with Aerospace Material Specification AMS 3025 as a Type II polymer quenchant. It can be used for processing a wide range of aluminum alloys such as 2024, 6061 and 7075, and is suitable for cast and forged components, extruded sections, brazed fabrications and assemblies manufactured from thin gauge sheet.

DATA (TYPICAL VALUES)

Appearance	Clear to Slightly Hazy Fluid
Kinematic Viscosity @ 100°F (37.8°C)	280 cSt
Specific Gravity @ 60°F (15.6°C)	1.08
pH	9.5

Date | version
Code

FEATURES / BENEFITS

- Uniform quenching eliminates steam pockets and formation of soft spots associated with water quenching
- Flexibility of quenching speed helps to minimize distortion and provide excellent dimensional control
- Water based quenchant to eliminate fire hazard and smoke associated with quenching oils along with cleaner parts

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 251

QRS #

Date: 3/12/2010

Test Parameters:

Sample Size - 1 liter

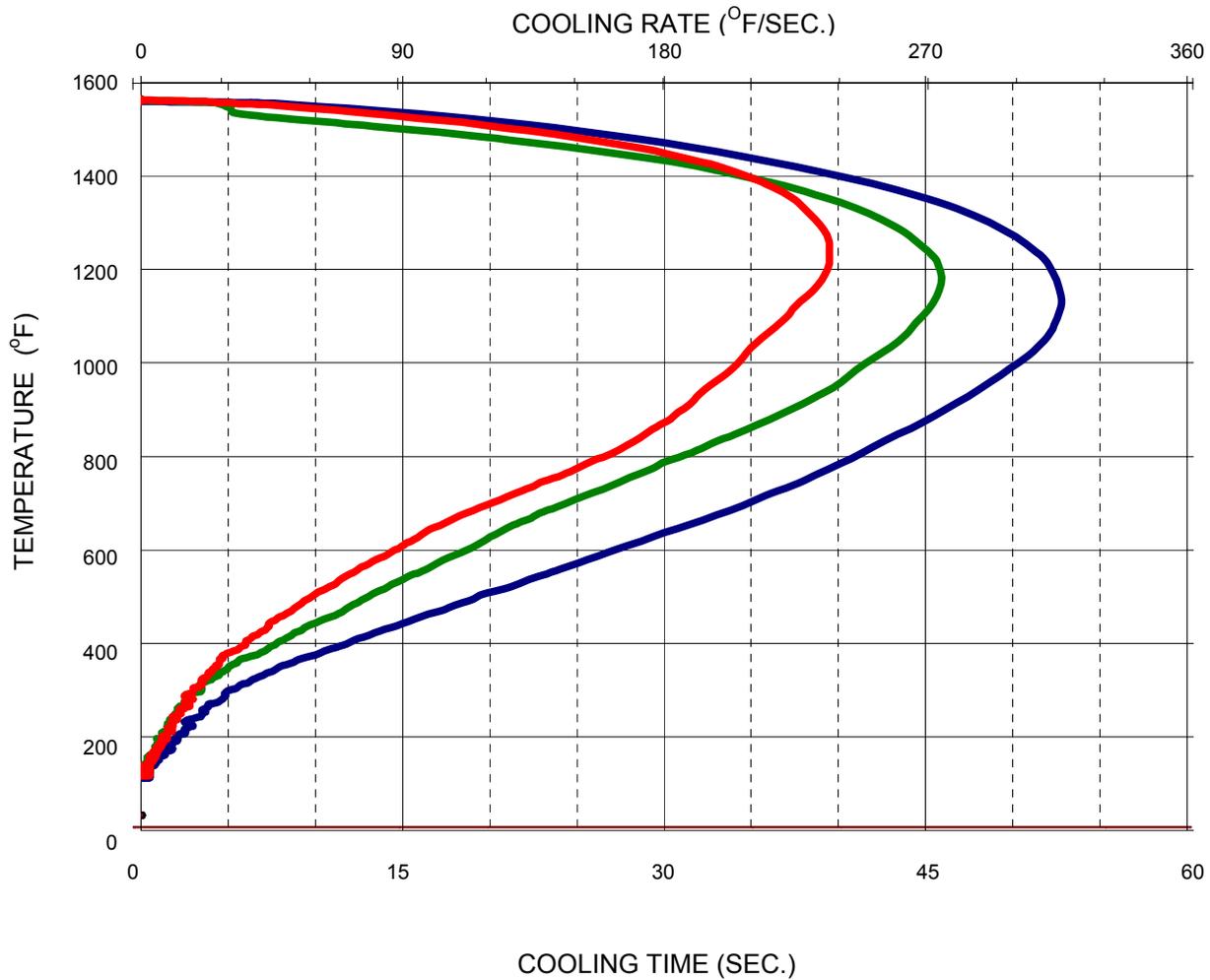
Bath Temp.- 100° F

Probe -IFHT Std. Inconel 600

Agitation-

Moderate

Sample #1-	Aqua-Quench 251	5%
Sample #2 -	Aqua-Quench 251	10%
Sample #3 -	Aqua-Quench 251	15%



COMMENTS:

Tested according to Houghton International laboratory procedure Q03.