### Better Results. Less chemistry.

Hubbard-Hall Inc. • 563 South Leonard Street, Waterbury, CT 07608 • HubbardHall.com • 800-648-3412

**Product Bulletin** 

Product Name: Clear Quench 100 Product Code: 2284000 Revision Date: July 22, 2021

# Clear Quench 100

Clear Quench 100 has been developed to address the needs of the heat treater who requires exceptionally clean and bright quenched parts. Clear Quench 100 is formulated from a highly refined paraffinic base oil, a combination of high temperature oxidation inhibitors and a synthetic quench rate accelerator. This combination produces a clear quench oil with quench speeds like conventional fast quench oils with higher oxidation stability and reduced sludging tendencies. As a result, stain free, bright finished parts can be expected.

### **Features & Benefits**

High oxidation stability	Long life;		
	Lower cost to use		
Clean bright surface	Low post quench finishing;		
	Lower process cost		
Fast	Higher productivity		

### **Physical Data**

	<u>ASTM</u>	<u>100°C</u>	<u>200°C</u>	<u>600°C</u>	<u>700°C</u>
Gravity, °API	D287	33	31.5	30	28
Flash, °F Min. C.O.C.	D92	375	430	455	470
Viscosity @ 100°F SUS	D2161	82	200	400	700
Pour, °F	D97	-15	-10	0	+15
Viscosity Index, Min.	D2270	95+	95+	95+	95+

# **Operating Conditions**

The Clear Quench 100 is designed to have a short vapor stage, an accelerated rapid boiling stage, and a slow smooth cooling rate through the critical martensite transformation temperature range to insure full hardness. The Clear Quench 100 is suitable for use up to 180°F.









#### Better Results. Less chemistry.

Hubbard-Hall Inc. • 563 South Leonard Street, Waterbury, CT 07608 • HubbardHall.com • 800-648-3412

#### **Product Bulletin**

Product Name: Clear Quench 100 Product Code: 2284000 Revision Date: July 22, 2021

Hubbard-Hall maintains a complete metalworking lab where cooling rate and cooling curve analysis can be performed on our Quench analyzer for your comparison. Please contact your sales representative for cooling curve data which may be of assistance in the selection of the proper quench oil.

WARRANTY: THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.

# Our people. Your problem solvers.

For more information on this process please call us at 1-800-648-3412

or techservice@hubbardhall.com













