



## SUNOCO SUNQUENCH OILS

### OVERVIEW

SUNOCO SUNQUENCH OILS are specifically designed to meet the needs of commercial heat treaters facing the challenge of today's increasing heat treatment problems. SUNOCO SUNQUENCH OILS are blended from high quality paraffinic base oils and specific formulated to maintain long term performance and operational productivity.

### FEATURES & BENEFITS

SUNOCO SUNQUENCH OILS exhibit superior heat transfer properties and utilize a specially formulated additive system to help collapse vapor blanketing and maximize transfer rates. By helping to eliminate sludge and varnish formation, SUNOCO SUNQUENCH OILS promote uniform cooling, help control rate variations and increased thermal gradients, as well as reduce the likelihood of product deformation.

### APPLICATIONS

#### CONVENTIONAL SUNQUENCH OIL

The SUNOCO QUENCH 1001 is recommended for the conventional quenching of steels with low critical cooling rates and bath temperatures up to 190°F.

#### FAST SUNQUENCH OILS

In those operations where metals require high critical cooling rates, SUNOCO has incorporated a speed additive for fast quench capabilities. These are particularly useful for hardening lower cost (lower hardenability) steels. These oils impart optimal physical properties to steels that cannot be sufficiently hardened by conventional quench oils. The viscosity of these products is low, oil runoff is fast, and drag out losses and the load on parts washers are reduced. SUNOCO SUNQUENCH 1021 is recommended for applications where it is important to maximize steel hardness while minimizing distortion. SUNOCO SUNQUENCH 1032 contains an additive that allows baths to be operated up to 250°F, reducing the danger of distortion and stress cracks. SUNOCO SUNQUENCH 1032 also prevents sludge and oxidation.

### TYPICAL PROPERTIES

Product Code	8913	8903	8933
PRODUCT	Sunquench 1001	Sunquench 1021	Sunquench 1032
Viscosity, cSt @ 40 °C	19.4	16.7	17.1
Viscosity, SUS @ 100°F	103	90	107
Gravity, ° API	33.1	32.0	31.5
Flash Point, °C/°F	390/220	365/186	370/188
Color	0.5	-	-
GM Quenchometer Nickel Ball	15 seconds	9.5 seconds	10.0 seconds