



Quenching Fluids

- Automotive Approved
- Widely Used By NADCAP Heat Treaters
- Use At Ambient Temperatures Up To 450°F
- Minimize Distortion & Eliminate Cracking

DuBois Oil Based Quenchants

DuBois oil based quenchants are ideal products for quenching intricate shaped parts and high-hardenability alloys. They will improve your process by:

- Easy cleaning for brighter work
- Exceptional oxidation-resistance and thermal stability to maximize bath life
- Less drag-out to minimize usage and cost
- Maximum quench control for predictable performance and consistent high quality parts

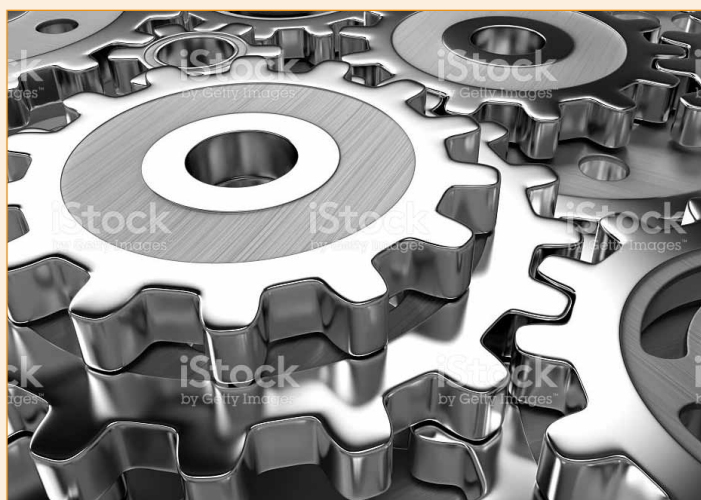
Product	Flash Point	Working Range	Viscosity @ 100°F in cSt
#50 Quench Oil	280°F (138°C)	75°-120°F (24°-49°C)	7
AAA Quench Oil	340°F (171°C)	75°-180°F (24°-82°C)	16
400 Quench Oil	340°F (171°C)	75°-180°F (24°-82°C)	17
Vacuum Quench Oil	380°F (193°C)	130°-160°F (54°-71°C)	23
High Speed Vacuum Quench Oil	385°F (196°C)	130°-160°F (54°-71°C)	27
420 Quench Oil	420°F (221°C)	200°-300°F (93°-149°C)	52
Marquench Oil M	435°F (224°C)	250°-350°F (121°-177°C)	71
Thermo-Quench Oil	545°F (285°C)	300°-450°F (149°-232°C)	560

#50 Quench Oil

A low viscosity oil that approaches water in quench speed, but offers a more uniform, less severe quench. It is recommended for open quench systems operating below 120°F.

AAA Quench Oil

The world's most widely specified accelerated fast oil quenchant. It is capable of quenching a variety of steels, sizes and shaped parts with little or no change in operating parameters. AAA Quench Oil achieves faster cooling rates through intensified action in the initial stages. This, and slower cooling through the martensitic transformation range, minimize distortion and ensures uniform maximum hardness to a greater depth. AAA Quench Oil is suitable for integral quenching and ideal for carbon, low and medium alloy steels. Automotive approved.



400 Oil

Similar to AAA, but contains additional accelerator additive for use in situations where excessive consumption occurs.

420 Quench Oil

A medium-hot oil ideal for high alloy steel and distortion prone parts. It is excellent for applications where distortion must be minimized with little sacrifice in as quenched hardness. Automotive Approved.

Marquench Oil M

An accelerated hot oil designed for use in carburizing and carbon nitriding furnaces or where parts are prone to distortion and cracking.

Thermo-Quench Oil

A hot (Marquenching) oil offering excellent thermal stability, high flash point and a fast quenching rate.

Vacuum Quench Oil

Formulated for quenching in integral vacuum style furnaces. It offers an excellent quenching rate and thermal stability, good viscosity and low volatility.

High Speed Vacuum Quench Oil

Similar to Vacuum Quench Oil, but contains additional accelerator additive for use in situations where excessive consumption occurs.

Quench Oil Accelerator

Restores the quench speed of AAA, 400 and 420 Quench Oils after prolonged use thus extending bath life.

DuBois Water Based Quenchants

While minimizing part distortion or breakage, water-based quenchants provide high hardness with fast quenching speed. Water based fluids are:

- Non-flammable
- Easy to clean off compared to oil
- Dilutable and have a low use cost
- Resistant to petroleum market price fluctuation

Product	Working Range	Typical Concentration	Viscosity @ 100°F in cSt
Alumiquench	75°-140°F (24°-60°C)	20%	4.3
Parquench 60	75°-150°F (24°-66°C)	15%	1.5
Parquench 90	75°-150°F (24°-66°C)	15%	3.1
Polyquench 15XN	75°-150°F (24°-66°C)	15%	3.2
Plastiquench	75°-110°F (24°-43°C)	5%	1.2
Enviroquench	75°-150°F (24°-66°C)	25%	6.4
Speed Quench #1	75°-150°F (24°-66°C)	10%	N/A

Alumiquench

Ideal for solution heat treating of a wide range of aluminum alloys. The polymer is inversely soluble above 165°F. Complies with Aerospace Material Specification 3025.

Parquench 60 Series

Low molecular weight polymer used for lower alloy steels, castings and forgings applications.

Parquench 90 Series

High molecular weight polymer used for higher alloy steels and all types of metals where the control of distortion is of prime importance.

Polyquench 15XN

Recommended for induction and direct hardening operations and has the following advantages:

- Resists breakdown
- Residue is not sticky on parts, racks, furnace equipment and is easily washed off
- Nitrite free additive package helps resist rusting, bacteria growth and foaming
- Applicable for immersion or spray quenching operations

Ideal for intricate carbon/alloy steel components, cast steel, forged steel, cast iron, ductile/malleable iron and aluminum alloys.

Plastiquench

Recommended for flame hardening applications. Plastiquench, a solution of polyvinyl alcohol, is used as a base for steel quenching media. It cools austenitized steels faster than quenching oils, and hardens steels with less distortion or breakage than straight water quenches.

Enviroquench

Environmentally friendly water based polymer that provides a quenching response similar to that of fast oils. Enviroquench is fortified with additives to prevent multi-metal corrosion.

Speed Quench #1

An inhibited "brine" quench supplied in granular form to be dissolved in water. While quenching like brine or caustic, it prevents rusting and does not generate disagreeable fumes.



Technical Support and Lab Capabilities

Customers need to know their quenchants are working optimally to ensure achieving success with their heat treat applications. DuBois/Heatbath provides professional technical expertise, rapid test results and practical heat treating knowledge. We offer quench curve testing with cooling rates to meet current revisions of AMS 2759 and CQI-9. Additional physical property testing consists of:

- Flash point
- Water content
- Insoluble matter
- Viscosity
- Oxidation level



DuBois Chemicals

3630 East Kemper Road
Sharonville, OH 45241-2011
800 438 2647

1 First Canadian Place
100 King Street West, Suite 1600
Toronto, ON M5X 1G5
866 861 3603

www.duboischemicals.com