

Value and sustainability

At Q8Oils, environmental awareness is embodied in a constant pursuit of solutions that guarantee customers an ever-higher level of performance combined with a minimised environmental impact. Q8Oils focuses all its development work on finding the perfect combination of these two fundamental requirements.

Our products represent the tangible synthesis of the value of Q8Oils: they are not just an answer to an operational need but veritable assets to be made available to customers to further enhance their business.



Increased productivity

The superior performance of our hardening fluids allows for **high control and optimisation of heat treatment**. The versatility of use guarantees profitable use in different applications, ensuring **multifunctionality and flexibility** capable of responding to increasingly stringent quality and production requirements.



Reduced operational costs

A higher quality product ensures **significant cost reduction along the entire production chain**. High resistance to thermal degradation and 'long life' performance guarantee a long service life without the need for intervention during operation. Lower volatility significantly reduces the need for top-ups due to fluid evaporation.



Improved working environment

The use of alternative, biodegradable bases, reduced energy consumption and increased productivity have a **positive effect on the environmental impact generated by the process**. The improved safety profile generates additional benefits that contribute to the healthiness of the working environment: the product's neutral odour and minimal or zero mist generation have a significant impact in terms of user tolerability.



Q8 Quesnel

the next generation of hardening fluids

Q8Oils, part of the Kuwait Petroleum International (KPI) Group, develops, produces, and markets high-performance lubricants for the automotive and industrial sectors across global markets.

To meet the ever-evolving demands of the industry, we invest continuously in research, innovation, and the optimization of our formulations. Our laboratories—located both in Europe and abroad—are at the forefront of technology, ensuring our products meet the highest standards in performance, reliability, and application versatility.

Q8Oils operates through a structured and widespread commercial network, with a sales force, customer service, and technical support team that are fully committed to delivering value. Wherever you are, our mission remains the same: to provide the best possible solutions to power your business forward.

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Advanced Heat Treatment Fluids

Driven by a commitment to innovation and the evolving demands of the industry, Q8Oils has developed a new generation of heat treatment fluids to complement its trusted, established product lines.

Leveraging the latest advancements in synthetic base stocks and high-performance additives, these new formulations deliver enhanced efficiency, improved safety, and a significantly lower environmental impact. Special attention has been given to minimizing atmospheric emissions and reducing fire risks during critical quenching operations—ensuring safer and more sustainable working conditions without compromising performance.

Attitude towards innovation

Q8 Quesnel synthetic-based products represent the new technological frontier that Q8Oils places at the service of companies where heat treatment plays a key role in the production process.

- These are advanced solutions to ensure new, high standards:
- **Constant performance over time** without the addition of additives during use;
 - **High productivity and flexibility to reduce TCO** (Total Cost Ownership);
 - **Improving the HSE profile** (Health, Safety, Environment);
 - **Compatibility** with other process fluids.

The Q8 Quesnel range

The hardening process is a key step in the production of metal products and is crucial to achieving the desired mechanical properties at the design stage. The choice of the appropriate extinguishing medium must take into account several factors, the most important of which are the chemical nature of the materials, the manufacturing process and the operating and plant conditions.

The wide range of Q8 Quesnel metal hardening fluids is designed to meet the most challenging demands.



Mineral oil-based fluids

Conventional hardening oils are developed from paraffin bases and represent the solution that combines operational efficiency and process economy.

Properties and Characteristics

	Viscosity cSt at 40°C	Flash Point °C	Operating temp. °C	Description
Q8 Quesnel C 1021 LL	21	230	40-80	Low viscosity, high drasticity, long life fluid
Q8 Quesnel C 1028	28	210	40-80	Versatile fluid for hardening carbon and alloy steels.
Q8 Quesnel C 1032	32	230	40-90	Moderate drasticity fluid for free hardening and controlled atmosphere furnaces.
Q8 Quesnel M 1062	62	230	60-110	Fluid for hot hardening in a controlled atmosphere that guarantees excellent deformation control.
Q8 Quesnel H 2130	130	270	80-160	High-temperature fluid with low volatility for high deformation control.



Natural gas-derived synthetic fluids

The natural gas-derived formulation gives remarkable resistance to thermal degradation and an improved surface finish. The lower volatility compared to conventional fluids results in a higher flash point and consequently lower emissions into the working environment. The low initial vapour phase ensures uniform hardening and excellent deformation containment.

Properties and Characteristics

	Viscosity cSt at 40°C	Flash Point °C	Operating temp. °C	Description
Q8 Quesnel C 7015	15	225	40-80	Drastic, low-viscosity fluid to minimise consumption.
Q8 Quesnel C 7021 LL	21	230	40-90	High drasticity fluid, stable over time, thanks to long-life additives.
Q8 Quesnel C 7030	30	240	40-90	Moderate drasticity fluid for free hardening and controlled atmosphere furnaces.

Ester-derived synthetic fluids

Fully mineral oil-free biodegradable fluid, formulated and additivated to ensure consistent performance over time. The high wettability ensures high initial drasticity, together with low oil mist-free emissions.

Properties and Characteristics

	Viscosity cSt at 40°C	Flash Point °C	Operating temp. °C	Description
Q8 Quesnel M 9050 BIO	50	290	40-110	Fluid with high thermal stability and exceptional deformation control, suitable for open tanks and controlled atmosphere furnaces.

Polymeric fluids

Water-based polymers ensure great versatility of use depending on the concentration of use and possess high stability against bacterial proliferation. The result is uniform hardening that eliminates the risk of fire and the emission of oily mists.

Properties and Characteristics

	Viscosity cSt at 40°C	Polymer type	Refractometer factor	Description
Q8 Quesnel WS 100	100	PAGE	2.6	Specific polymer for cooling aluminium alloys and surface hardening.
Q8 Quesnel WS 300	300	PAGE	2.0	A polymer with high versatility and excellent performance in both bulk and surface hardening.
Q8 Quesnel WS 1000	1000	PAGE	1.6	High molecular weight polymer for high performance.



Greater
deformation
control



Contains no
sulphur, nitrogen,
aromatic
compounds, PAHs
or BaPs



Very narrow
molecule
distribution



Special additive
supplementation
long life



High oxidation
stability



High flash point
and low volatility