



# THERMIC TO 19 R

Heat Treatment - Cold quenching

## DESCRIPTION

**THERMIC TO 19 R** is a cold quenching oil with a high flash point, used for heat treatment of good hardenability steel and parts with simple geometric shape.

## APPLICATIONS

**THERMIC TO 19 R** is specially adapted to parts with complex geometry, and are sensitive to distortion during quenching:

- Mid-hard carbon steels: XC 38, XC 42
- Hard carbon steels: XC 60, XC 70, XC 80
- Low alloyed steels: 18 CD 4, 25 CD 4, 35 CD 4
- Mid alloyed steels: 50 CD 4, 42 CD 4, 35 NCD 16

**THERMIC TO 19 R** is recommended for all alloyed and semi-alloyed steels heated on salty bathes, hardening furnace, bell oven, continuous and conveyor furnaces.

## ADVANTAGES

- Reduced consumption thanks to its fluidity.
- Excellent thermic shock resistance thanks to its high quality additives.
- Reduces the calefaction area.
- Reduces fire risk thanks to its high flash point.

## TECHNICAL INFORMATION

TECHNICAL CHARACTERISTICS	UNITS	METHOD	THERMIC TO 19 R
Color	-	Visual	Light Yellow
Density	-	ASTM D4052	0.864
Viscosity at 40°C	°C	ASTM D445	29.3
Viscosity index	-	ASTM D2270	103.0
Flash point	-	ASTM D92	218
Self-Ignition Point	°C	ASTM D92	248.0
Storage	-		in frost-free, dry place

These characteristics are given only for information and can be updated over time.

## PROPERTIES

- Stable quenching power between 30 and 90°C
- Reinforced with antioxidant additives



- Excellent wetting properties

## SERVICES AND EQUIPMENT

In addition to its product ranges, MotulTech can provide tools and services for the maintenance and monitoring of your lubricants. Please contact your technical sales representative for more information.

### Important Notice

Information disclosed in this technical data sheet is based on MOTUL's experience and know-how in the development and manufacture of lubricants and other chemical products according to the current state of knowledge.

Any chemical product must be used in the intended application and in accordance with the recommendations provided in its safety data sheet freely consultable via the site <https://www.quickfds.com/fr/>. The performance of our products may be influenced by a series of factors, including conditions of use, application methods, operational environment, pretreatment of components, possible external contamination, etc ... For these reasons, universal recommendation of our products is impossible. The information in the technical data sheet represents general, non-binding guidelines and is given for guidance only. No express or implied warranty is given regarding the properties of the product or its suitability for a given application.

Therefore, we recommend consulting an application engineer to discuss application conditions and product performance criteria before use. It is the user's responsibility to test the functional suitability of the product and to use it under appropriate safety conditions. Our products are subject to continuous improvement with the aim of improving performance or bringing them into compliance with any new and possible regulations concerning them. We reserve the right to change our product lines, our products and their manufacturing processes and any provisions of our publications at any time without notice. This technical sheet cancels and replaces all previous editions.

We expressly draw the attention of any user to the fact that our product has not been designed and tested for use in the field of aeronautics as an "onboard" product or in the field of nuclear power production. Any use that may be made of the product in one of the aforementioned sectors will be under the exclusive responsibility of the user. Any reproduction, whatever its form, requires the prior written consent of MOTUL. All rights reserved.