



# TMC-19 VACUUM PUMP FLUID

TMC-19 Vacuum Pump Fluid is a replacement for Inland 19 Oil.

## PRODUCT INFORMATION

TMC-19 Vacuum Pump Fluid is a molecularly distilled, hydrotreated paraffinic oil for use in mechanical vacuum pumps. TMC-19 will support vapor pressures down to  $1 \times 10^{-5}$  Torr. If a deeper vacuum is desired, TMC-20 would be a viable option.

## APPLICATIONS

*Not recommended for oxygen and highly reactive gas loads.*

- Mass Spectrometry
- Electron Microscopy
- Thin Film Sputtering
- UHV Systems
- Freeze Dry Systems
- Non-Corrosive General Applications

## FEATURES

- Double Vacuum Distillation
- Excellent Lubricating Qualities
- Reduced Backstreaming
- Excellent Vapor Pressure Characteristics

## MATERIALS COMPATIBILITY

TMC-19 is reactive or incompatible with oxidizing materials.

## PERFORMANCE

An independent testing laboratory performed a modified RBOT D-2272 test to determine the oxidative stability of TMC-19 compared to Inland 19. This test employs a method to achieve rapid oxidation of the lubricant tested and then measure the degradation characteristics of the oil.

In the test results below, you will see that even though TMC-19 lasted longer than Inland 19, it also exhibited less viscosity change and less sediment weight.

	TMC-19	INLAND 19
<b>Total Min. to Destruction</b>	40	35
<b>Viscosity Change @ 40°C</b>	+9.18%	+13.98%
<b>Sediment Weight</b>	31.7 mg	41.3 mg



## PHYSICAL & ENVIRONMENTAL PROPERTIES

PROPERTY	UNITS	TMC-19
Vapor Pressure	Torr	1x10 <sup>-5</sup>
Viscosity @ 40°C	cSt	59
Pour Point	°C	-18
Specific Gravity @ 22°C	g/mL	0.86
Flash Point — C.O.C.	°C / °F	235 / 455
Fire Point — C.O.C.	°C / °F	260 / 500

Not for specification purposes. All values @ 25°C unless otherwise specified.

## PACKAGING

TMC-19 is available in the following sizes and weights:

- 1 Gallon Jug — 7 lb / 3.2 kg
- 5 Gallon Pail — 36 lb / 16.3 kg
- 55 Gallon Drum — 395 lb / 179 kg
- 275 Gallon Tote — Available Upon Request

## SHELF LIFE & STORAGE

Shelf life is 5 years from the date of manufacture when stored in the original packaging materials and stored under normal conditions. TMC will re-certify material every 5 years up to 20 years.

## DISPOSAL & RECYCLING

This fluid can be recycled and reused. Help protect the environment and don't pay for expensive disposal services.

TMC Industries can reclaim your used fluorinated fluids, restoring them to like-new condition, and save you up to 50% in replacement fluids while protecting the environment.

TMC Reclaimed Fluids are tested to meet new product specifications. It will be clear and odorless, and a Certificate of Analysis is issued with every order.

TMC Industries offers a **100% satisfaction guarantee** on all our reclaimed fluids. We back this up with a no-questions-asked refund policy. To learn more, [click here](#).

## EXTERNAL DOCUMENTS

- [TMC Used Fluid Reclamation Service Brochure](#)

**Safety and Handling:** Before using this product, please thoroughly read the current product SDS and label, following all applicable safety precautions described therein (e.g., recommended storage and safe handling, appropriate exposure controls and personal protective equipment (PPE), addressing accidental spills, disposal considerations, etc.).

**Safety Data Sheet:** Consult Safety Data Sheet before use.

**Regulatory:** For regulatory information about this product, contact your TMC representative.

**Technical Information:** The technical information, recommendations and other statements contained in this document are based upon tests or experience that TMC believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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