RENOLIN THERM 320
Heat transfer fluid

Description

RENOLIN THERM 320 is a high-performance heat transfer fluid based on selected, highly refined mineral oils for use in the liquid phase in closed heat transfer systems with forced circulation. RENOLIN THERM 320 (heat transfer oil Q DIN 51 522) can be used over the entire working range without pressure overlap.

Application

RENOLIN THERM 320 is optimal suited for use in the indirect heating of reactors, polymerization and distillation systems, processing machines and driers, as well as heat exchangers in processing systems, and in systems for heat recovery.

The heat transfer fluid is best used at temperatures ranging from 200°C to 300°C. The upper limit for use is an inlet temperature of 300°C.

The film temperature should not exceed 320°C.

Specifications

Heat transfer fluid Q according to DIN 51 522.

Advantages

- **Excellent thermal stability**

- **Extremely low coking**

- **Low residue formation, clean systems**

- **Good heat transfer properties**

- **Protects against corrosion**

- **Long service life**

- **Pumpable to +5°C**

- **Permissible film temperature: 320°C**

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Typical technical Data:

Properties	Unit	Data	Test method
Initial boiling point at 1013 mbar	°C	390	ASTM D 1160
Pour point	°C	-12	DIN ISO 3016
Density at 15°C	kg/m³	870	DIN 51 757
Kinematic viscosity at 0 °C at 40 °C at 100 °C	mm²/s mm²/s mm²/s	535 43,7 6,5	DIN EN ISO 3104
Flash point, COC	°C	225	DIN ISO 2592
Ignition temperature	°C	350	DIN 51 794
Permissible inlet temperature	°C	300	-
Permissible film temperature	°C	320	-
Pumpability limit	°C	+5	-

Stoff / *Product* (Handelsname / *Brand Name*)	Temperatur *Temperature*	Dichte *Density*	spez. Wärme- kapazität *spec. heat* *capacity*	Wärmeleit- fähigkeit *Heat con-* *ductivity*	kinematische Viskosität *kinematic* *viscosity*	Prandtl- Zahl *Prandtl* *coefficient*
	°C	kg/m³	kJ/kg K	W/m K	m²/s E-06	-
RENOLIN THERM 320	0	879	1,864	0,134	535	6543
	50	848	2,078	0,131	28,6	385
	100	816	2,293	0,127	6,5	96
	200	750	2,721	0,120	1,5	26
	300	685	3,151	0,113	0,7	13,4
	320	672	3,236	0,111	0,6	11,8

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