

LUBRICANTS FOR INDUSTRIAL USE

CEPSA DIATERMO S

DESCRIPTION

Synthetic thermal fluid formulated with alkylbenzene, developed to obtain optimum heat transfer. Its formulation has been designed to improve pumpability (which facilitates start-up at low temperatures) and to lengthen the operating period of the oil, compared to other mineral oils.

PRODUCT APPLICATIONS

- Specially developed to be used as a heat transmitter in systems where the use of water or steam is not possible.

PRODUCT PERFORMANCE

- This product makes it possible to work at pressures lower than with steam.
- Greater efficiency in heat transfer, as compared to using mineral fluids.
- Exceptional thermal and oxidation stability. Minimal formation of carbonaceous residue.
- Does not corrode metals used in heat transfer systems.
- Longer life span than mineral fluids.
- Its low freezing point facilitates starting and provides good pumpability at very low temperatures.

SPECIFICATIONS

- DIN 51522
- ISO 6743 L-QB

TYPICAL CHARACTERISTICS

CHARACTERISTIC	UNITS	METHOD	CEPSA DIATERMO 22
Application temperature range	°C	-	-40 to 300 (max. 310)
Density at 15°C	Kg/l	ASTM D-4052	0.874
Flash point, COC	°C	ASTM D-92	216
Freezing point	°C	ASTM D-5950	-45
Viscosity at 40°C	cSt	ASTM D-445	20.5
Viscosity at 100°C	cSt	ASTM D-445	3.82
Copper corrosion (3 h/100°C)	-	ASTM D-130	1A
Distillation		ASTM D-86	
Starting Point	°C		340
5%	°C		350
End Point	°C		380

Design data for thermal systems

Temperature (°C)	Specific heat (J/g°C)	Steam pressure (psia)	Density (g/cm3)	Viscosity (cSt)
20	2.2565	<0.002	0.8712	54.3461
40	2.3651	<0.002	0.8589	20.8000
60	2.4396	<0.002	0.8466	10.1880
80	2.5186	0.0020	0.8342	5.8899
100	2.6004	0.0050	0.8217	3.8200
120	2.6781	0.0130	0.8092	2.6907
140	2.7516	0.0310	0.7965	2.0149
160	2.8304	0.0710	0.7837	1.5813
180	2.9336	0.1490	0.7708	1.2877
200	3.0253	0.2940	0.7578	1.0802
210	3.0824	0.4040	0.7513	0.9988
220	3.1336	0.5500	0.7447	0.9286
230	3.1792	0.7400	0.7380	0.8678
240	3.2494	0.9800	0.7313	0.8147
250	3.2813	1.3000	0.7246	0.7681
260	3.3310	1.7000	0.7178	0.7271
270	3.3584	2.1000	0.7109	0.6908
280	3.3906	2.7000	0.7040	0.6585
290	3.4351	3.4000	0.6971	0.6297

HEALTH & SAFETY AND ENVIRONMENT

Health, safety and environmental information is provided for this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures together with environmental effects and disposal of used products.