

Tentative Bulletin

MCS 681

A low cost heat transfer
fluid for use to 575°F.
A suitable flushing fluid
for Therminol FR fluid
conversions.

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Monsanto Industrial Chemical Co.
Specialty Products

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Typical Properties of MCS 681

Composition	Refined, aromatic oil
Appearance	Yellow, oily liquid
Odor	Faint
Pour Point	-15°F
Flash Point, C.O.C.	350°F
Fire Point, C.O.C.	390°F
Autoignition Temperature	675°F
API Gravity 60/60	22
Specific Gravity at 75°F	0.925
Density, lb./Gal. at 75°F	7.7

Variations of Physical Properties With Temperature

Temperature °F	Density °C	Density lb./gal.	Density kg/m ³	Specific Heat Btu/lb.°F	Thermal Conductivity Btu/hr.ft.°F	Visc. cs	Vapor Pressu mm Hg
0	-18	7.90	948	0.39	0.073	4000	-
100	38	7.60	912	0.431	0.071	32	0.8
200	93	7.31	877	0.472	0.069	5.7	5.5
300	149	7.01	841	0.516	0.067	2.3	28
400	204	6.71	805	0.556	0.064	1.25	100
500	260	6.43	770	0.599	0.062	0.87	300
600	3.6	6.13	735	0.640	0.060	0.63	700

MCS 681 is not a fire resistant fluid, even though it has a high flash and fire point. Suitable precaution should be taken to minimize the risk of fire when using MCS 681 above its flash point.