THERMINOL 77

Preliminary Technical Data Sheet

August 1, 1963

DEVELOPMENT DEPARTMENT
MONSANTO CHEMICAL COMPANY

ORGANIC CHEMICALS DIVISION
ST. LOUIS 66, MISSOURI

TO ASSIST YOU IN THE EVALUATION OF THE ABOVE PRODUCT, WE HAVE OBTAINED THE INFORMATION CONTAINED IN THIS BULLETIN FROM LITERATURE SOURCES AND PRELIMINARY INVESTIGATION IN OUR OWN LABORATORIES. WHILE WE BELIEVE THE INFORMATION IS ACCURATE, WE ASSUME NO RESPONSIBILITY AND DISCLAIM ANY LIABILITY INCURRED IN USING THESE DATA OR SUGGESTIONS. ONLY QUALIFIED TECHNICAL PERSONNEL SHOULD WORK WITH THIS PRODUCT UNTIL SUBSEQUENT STUDIES JUSTIFY ITS USE IN YOUR PRODUCTS OR PROCESSES. OBVIOUSLY NOTHING IN THIS BULLETIN SHOULD BE CONSTRUED AS A RECOMMENDATION TO USE ANY PRODUCT IN CONFLICT WITH EXISTING PATENTS COVERING ANY MATERIAL OR ITS USE.

Temp. °F	Vapor Pressure (mm Hg)	Viscosity (cs)	Viscosity (Lbs/Ft-Hr)	Density (GMS/cc)	Density (Lbs/Gal)
100	---	181	505	1.152	9.60
210	---	7.78	20.8	1.106	9.22
300	0.27	---	---	---	---
400	1.03	1.50	3.74	1.029	8.58
500	9.2	0.96	2.28	0.981	8.16
600	44	0.66	1.49	0.931	7.76
700	168	0.46*	0.99	0.885	7.38
800	530	---	---	---	---

Temp. °F	Specific Heat (BTU/Lb)	Thermal Conductivity (Cal/cm, °C, sec), (BTU/Hr, Ft, °F)
100	0.350	32.25×10^{-5}
200	0.385	31.40×10^{-5}
300	0.420	30.50×10^{-5}
400	0.455	29.65×10^{-5}
500	0.495	28.80×10^{-5}
600	0.530	---
700	0.565	---
800	0.600	---

*Extrapolations

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Refractive Index	1.6413
Pour Point	+45°F
Flash Point	460°F
Fire Point	540°F
A. I. T.	1115°F
Thermal Decomposition	800°F

Electrical Properties

	60 Cycle	1000 Cycle
Dielectric Constant at 100°C	3.77	3.54
Power Factor at 100°C, %	19.3	1.21
Resistivity, ohm-cm	at 100°C 29×10^9	

Oxidation-Corrosion Test (48 hrs, 450°F, Air)

% Viscosity Incr. at 100°F	37
at 210°F	13

Metal Weight Loss, mg/cm^2

Cu	-1.56
Fe	+0.01
Mg	+0.02
Ag	-0.99
Ti	0.0
Al	0.0

CLE:pz
100

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