

**#24 / #25 Polyurethane Foam**



**Overview:** #24 is the 6 component of a two component polyurethane system, which when combined with the component #25, will produce an HCFC-141 b/ water co-blown rigid polyurethane foam that can be used for low-density insulation and flotation applications. This foam system meets Military Specifications P-21928B.

**Typical Component Properties:**

	<b>#25</b>	<b>#24</b>
Viscosity @ 25°C. cps	200	400
Specific Gravity @ 25°C, g/ml	1.24	1.12
Mixing Ratio, % by weight	50	50

**Typical Reactivity Properties:**

Hand Mix Reactivity @ 25°C

Cream Time, seconds .....	24
String Time, seconds .....	90
Cup density, #10 cup, pcf .....	2.00

**Typical Foam Properties:**

Density, ASTM D-1622	
Molded, overall, pcf .....	3.4
Core, pcf .....	2.7
Compressive Strength, 10% deflection	
Parallel, psi .....	25.3
Perpendicular, psi .....	30.5
Compressive Strength Change, MiI-P-21929B, % change .....	2.35
Initial K-factor, ASTM C-518, BTU in/hr ft <sup>2</sup> °F.....	0.141
Shear Strength, ASTM C-273, psi .....	31.0
Tensile Strength, ASTM D-1623, psi .....	51.9
Water Absorption, ASTM D-2842	
lb/ft <sup>2</sup> .....	0.083
% By volume .....	4.7
Tumbling Friability, ASTM C-421, % loss .....	11.1
Closed Cell Content, ASTM D-2856, % .....	95
Compression Set, MiI-P-21929b, % loss .....	0.97
Oil Resistance, ASTM D-471, Mil-P-21929B.....	Pass

**Dimensional Stability, ASTM D-2126, % volume change:**

	<u>@-20°F</u>	<u>@ 158°F</u>	<u>@158°F/ 100%R.H.</u>	<u>@100°F/ 100%R.H.</u>
1 day	0.2	0.3	5.3	1.3
7 days	0.1	1.0	7.0	2.1
14 days	0.2	1.5	7.9	2.5
28 days	0.3	1.8	8.9	3.5