



ASSYST bvba / A.S.O.W. bvba
Hellegatstraat 13a - 2590 Berlaar - Belgium
Tel: +32 495 50 61 14 / +32 496 83 70 27
Website: www.assyst.org / www.artsuppliesonweb.com
Email: ao@assyst.org / vera.opsommer@assyst.org

POLYURETHANE FOAM SOFT A+B

APPLICATION AND CHARACTERISTICS

The Flexible Polyol / Isocyanate Flexible Polymer Foam system we offer is a two-component system designed to be poured at room temperature (20 - 30°C) without post-treatment.

The polyol is a polyether, and the isocyanate is a modified MDI. This system was specially developed for the seating furniture industry.

TECHNOLOGY

Products:

Polyol Flexible polyurethane:	Polyol Polyether
Isocyanate soft foam:	Modified MDI.

PROCESSING

Mixing ratio and product temperatures:

Polyol/isocyanate ratio:	100 / (50-100)
Moulding temperature:	40-55°C
Product temperature:	25°C-35°C

The temperature of the chemical components must be set correctly before use to achieve the right level of reactivity and viscosity.

TECHNICAL DATA OF THE SYSTEM

Polyol | Flexible foam A-component

Viscosity:	650 Cps (25°C)
Colour:	Amber
Density:	1060 g/L
Flash point:	> 200°C

Isocyanate | Flexible foam B-component

Viscosity:	175 Cps (25°C)
Colour:	Amber
Density:	1220 g/L
Flash point:	> 200°C

PROCESSING PROPERTIES

Reactivity	
Cream time:	25s
Gelling time:	105s
Rise time:	150s
Free density:	45 g/l



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MECHANICAL PROPERTIES

Mechanical properties measured in laboratory tests.

Mixing ratio	100/50	100/70	100/80	100/90
	Cushion	Seat	Firm seat	Very firm seat
Density kg/m ³ Iso 845	44	45	45	45
ILD (N) 25 - Iso 2439	63	101	149	226
40%	96	150	224	340
65%	212	340	490	740
SAG	3.35	3.37	3.29	3.27
Hyst.	16	16	19	22
CLD (kPa) - Iso 3386-1				
25%	1.2	1.9	3.05	4.7
40%	1.6	2.7	4.15	6.3
50%	2.1	3.6	5.41	8.1
65%	4	6.8	10.1	14.95
Hyst.	13.1	13.9	15.5	21
Rebound (%) - Iso 8307	60	66	64	60
Tear strength (N/m) - Iso 8067	99	112	119	154
Tensile strength kPa - Iso 1798	55	70	84	123
Rack - Iso 1798	105	90	84	77
Compression set - Iso 1856				
Core Dry				
50%	2.5	2.6	3.2	3.8
75%	3.3	3	2.7	4.4
90%	-	3.4	3.6	5.9
Core wet				
50%	3.1	3.7	5.1	5.8
75%	3.2	3.8	4.9	5.8
90%	2.8	3	4.1	4.8
C+S Dry				
50%	5.1	5	5.9	8.1
75%	10.8	6.5	8.4	10.4
90%	-	10	11.1	13.6
C+S Nat				
50%	3.6	4.2	6.3	9.6
75%	3.9	4.7	5.8	9.5
90%	6.6	4.5	6.6	9.4