



Development Associates, Inc

300 Old Baptist Rd. N Kingstown, RI 02852
Tel (401) 884-1350 FAX (401) 885-7888 www.developmentassociatesinc.com.



Ref No: Z7500ABDSV1
page 1 of 2

Data Sheet Z-7500 Polyurethane Compound

Product Name: Z-7500

Revised: 4/18/2007

Supersedes: 8/15/2006

Description

Z-7500 is a clear polyurethane compound for use on decals, labels, emblems and other decorated substrates. Also suitable for potting solar cells.

Hazards

Part A is manufactured for commercial use only. (See MSDS). Part B contains aliphatic diisocyanate and polymeric isocyanates (See MSDS for safe handling instructions).

Storage

Both Part A and Part B are sensitive to moisture and containers must be kept closed during storage. Storage temperature can be ambient, however the material should be warmed to 90 – 110°F before using.

Component Z-7500 Part A

Typical Liquid Properties

Appearance	Hazy liquid with a slight yellow tint
Specific Gravity	1.10 @ 100°F
Weight per Gallon	9.14 @ 100°F
Brookfield Viscosity	600 +/- 100 Cps. @ 100°F #2 Spindle RVT @ 20 rpm
Hydroxyl Value	290-310
Acid Value	less than 0.75
Water Content	less than 0.1%
Storage Life	At least 1 year in sealed drums or 5 gallon cans. 90 days in disposable bags.

Component Z-7500 Part B

Typical Liquid Properties

Appearance	Clear liquid
Specific Gravity	1.10 @ 100°F
Weight per Gallon	9.13 @ 100°F
Brookfield Viscosity	140 +/- 50 Cps. RVT #2 Spindle, 50 rpm @ 100°F
NCO Value	22.7 +/- .05%
Storage Life	At least 1 year in sealed drums or 5 gallon cans. 90 days in disposable bags.

All information, recommendations and suggestions contained herein are to the best of our knowledge true and accurate, but are made without guarantee. No warranty of fitness for a particular purpose is made. Nothing herein shall be construed to allow infringement of any patent.

Mixing Information

Ratio by Weight	Part A	50
	Part B	50
Ratio by Volume	Part A	50
	Part B	50

Curing

Gel Time The geltime of Z-7500 is adjustable from 4 to 25 minutes.
Standard product Z-7500-5.05 4-6 minutes

Cure Time 100-200°F 4-16 hours

Typical Physical Properties

Hardness 90-95 Shore A 45-65 Shore D

Note: Hardness may be reduced by altering the ratio reducing the amount of Part B (ISO). See technical data for Z-7500-M1.

Heat Aging 7 days @ 85°C, no change

Weathering 2 years South Florida: No yellowing, no significant loss of gloss.
5 years Accelerated Outdoor Weathering ASTM G90: No yellowing, no loss of gloss.
Xenon Arc accelerated weathering: No yellowing no significant loss of gloss.

Humidity Resistance 7 days 100%RH @ 100°F, no change

Shrinkage on Cure 0.5% cured at room temperature
1% cured at 75°C

Thermal Coefficient of Expansion Approximately $8 \times 10^{-5} \text{ } ^\circ\text{C}$

Index of Refraction 1.475

Total Integrated Transmission 90%

UV Cutoff 360nm

All information, recommendations and suggestions contained herein are to the best of our knowledge true and accurate, but are made without guarantee. No warranty of fitness for a particular purpose is made. Nothing herein shall be construed to allow infringement of any patent.