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Ref No: Z8500ABDSV2

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Data Sheet

Z-8500 Polyurethane Compound

Product Name: Z-8500

Revised: 4/18/2007

Supersedes: 1/22/2006

Description: Z-8500 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-8500 Part A

Typical Liquid Properties:

Appearance: -	Clearliquid with a slight yellow tint.
Specific Gravity:	1.07 @ 100°F
Weight per gallon:	8.9 @ 100°F
Brookfield Viscosity:	450 +/- 100 Cps. RTV #2 Spindle, @ 20 rpm., @ 38 °C
Hydroxyl Value:	280-290
Acid Value:	less than 0.75
Water Content	less than 0.1%

Component Z-8500 Part B

Typical Liquid Properties:

Appearance:	Clear liquid
Specific Gravity:	1.10 @ 100°F.
Weight per gallon:	9.13 @ 100°F.
Brookfield Viscosity:	150 +/- 50 Cps. RVT #2 spindle, @ 50 rpm, @ 38°C
NCO Value:	21.4+/- .1

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	49.35
	Part B	50.65
Ratio by Volume:	Part A	50
	Part B	50

Curing:

Gel Time: The geltime of Z-8500 is adjustable from 4 to 20 minutes.
Standard products: Z-80500-5.05 A is 4-6 minutes, Z-8050-10.05 is 10-12 minutes.

Cure Time: 100-200°F - 4-16 hours

Typical Physical Properties:

Hardness: 85-90 Shore A 45-55 Shore D

Heat aging: 7 days @ 85°C, no change.

Weathering: Two 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: 360 nm

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