

## LABORATORY TEST REPORT

**Report for:** Transparent Protection Systems

6643 42<sup>nd</sup> Terrace North West Palm Beach, FL 33407

**Attention:** J. Charlie French

Product Name:	Clearguard Plastic	Manufacturer: Transparent Protection Systems
Date Tested:	June 12, 2001	Source: Transparent Protection Systems
PRI Project No.:	TPI-001-02-01	Metro Dade Notification No.: PRI01041

**Subject:** The purpose of this project was to test and evaluate Clearguard plastic material before and

4500 hours of ASTM G 26 Xenon Arc Weatherometer exposure.

Test Methods: The test methods used included those found in ASTM D 638, Standard Test Method for

Tensile Properties of Plastics. Specimens were exposed for 900 hours in a Xenon Arc Weatherometer in accordance with ASTM G 26, Standard Practice for Operating Light Exposure Apparatus (Xenon-Arc Type) With and Without Water for Exposure of Non-Metallic Materials. Test specimens were conditioned at 73EF/50% RH for 40 hours prior to testing. Samples were cut to Type I dimensions using a TensilKut Machine. The crosshead speed

was 2.0 in. per minute.

Date: November 8, 2001

Transparent Protection Systems ASTM D 638, Tensile November 8, 2001 PRI01041 Page 2 of 3

## **Results of Testing:**

Specimen ID	Result				
	Thickness, in	Maximum Load at Yield, lbf	Maximum Stress at Yield, psi	Elongation at Break, %	Maximum Load at Break, lbf
Cleargard Plastic As Received					
1	0.100	433	8720	114	413
2	0.100	446	8944	121	432
3	0.100	433	8624	137	432
4	0.085	385	8835	96.3	333
5	0.077	339	8721	127	347
Mean	0.092	407	8769	119	391
Standard Deviation	0.011	44.8	123.3	15.4	47.9
Clearguard Plastic After 4500 hours exposure in Xenon Arc Weatherometer					
1	0.099	442	8945	51	350
2	0.085	375	8742	52	297
3	0.090	382	8436	30	296
4	0.097	430	8835	60	343
5	0.086	383	8968	80	313
Mean	0.091	402	8785	55	320
Standard Deviation	0.006	31.2	215.2	17.8	25.5

The change in tensile strength or maximum load at yield between the unexposed and 4500 hour weatherometer exposed is a loss of 1.2 percent.

TPI-001-02-01

PRI Accreditations: ICBO TL-189; Metro-Dade 98-0608.07

Transparent Protection Systems ASTM D 638, Tensile November 8, 2001 PRI01041 Page 3 of 3

The unexposed and 4500 hour weatherometer exposed tensile strengths or maximum load at yield of this material was determined in accordance with the requirements of Miami-Dade County Building Code Compliance Office CHECKLIST #0445 FOR THE APPROVAL OF PLASTIC AND FOAM PLASTIC and was found to comply with the requirement of a change of less than ±10 percent.

Signed:		Signed:	
	Donald C. Portfolio Vice - President	Charles L. Thomas Professional Engineer	
Date:	_	Date:	

TPI-001-02-01

PRI Accreditations: ICBO TL-189; Metro-Dade 98-0608.07