

#### **Piedmont Offers**

- **Over 50 Branch Locations**
- Expert Product Knowledge
- **⊘** Local Inventory & Value-Added Services

#### Who We Are

At Piedmont Plastics®, our recipe for success for over 50 years has been excellent customer service, local, knowledgeable employees, and competitive prices on the world's best brands.

In that time, we have grown from a local supplier of basic plastic shapes and films, to one of the leading plastic distributors in North America.

With a reputation for integrity that permeates every aspect of our business, we have established a legacy of customer service and product quality. We embrace every opportunity to promote enjoyable, profitable relationships with our customers, employees and suppliers.

With over 50 distribution centers throughout North America, chances are, we have what you need, when you need it... *FAST*.



## **Our Commitment**

#### **Customer service is a core value of Piedmont Plastics.**

We are committed to providing every customer with the highest level of service in the industry.

This commitment reaches far beyond simply providing you with our knowledgeable sales representatives and the right product mix.

Through our dedication to this goal, our customers have come to rely on us for:

- On-Time Shipping
- Industry Expertise
- Quality Management Systems
- Premier Brands
- State-of-the-Art Conversion Equipment



Find more solutions at www.piedmontplastics.com

your trusted source for **PERFORMANCE PLASTICS** 



## **Polycarbonate Sheet**

## **Polycarbonate FP**

Glazing that can be structurally bonded to cab and offers excellent UV and scratch protection.

## **Polycarbonate AR**

Glazing that must be mechanically fastened and offers excellent UV and scratch protection.

## **Polycarbonate HV**

Glazing that performs similarly to Polycarbonate AR, but with improved optics and protection for heavy equipment.

## **Polycarbonate TG**

Glazing that performs similarly to Polycarbonate HV, but will meet most transportation codes.

## Hygard®, Lexgard®, & AZCARB BR

Laminated glazing applications that require operator protection from flying objects, ballistic and forced entry protection, and must be flat, not curved.

#### **Custom Solutions**

Anti-fog coatings, thermoformed parts, hard coating, fritting, part identification, and laminating.







SHEET

## **Heavy Glazing Equipment**

Polycarbonate HV sheet is a premium hard-coated polycarbonate engineered for applications requiring superior clarity, durability, and weatherability.

Manufactured using advanced production and quality control processes, it offers low optical distortion and exceptional resistance to abrasion and chemicals.

The durable hard coat also ensures reliable performance in outdoor environments. Polycarbonate HV is available in clear and a range of standard or custom tints to suit specific design and functional needs.



# **Applications**

Off-road, specialty and heavy duty vehicle glazing.

# **Typical Properties\***

Property	Test Method	Units	Values
<b>Physical</b> Specific Gravity			
Light Transmission, Clear, 0.375"	ASTM D 1003	%	80
Light Transmission, Clear, 0.500″	ASTM D 1003	%	77
Chemical Resistance	ANSI Z26.1	-	Pass
Taber Abrasion @ 100 Cycles, Delta Haze CS-10F Wheel @ 500 g load	ASTM D 1044	%	2
Mechanical			
Flexural Strength	ASTM D 790	psi	13,500
Compressive Strength	ASTM D 695	psi	12,500
Modulus of Elasticity	ASTM D 638	psi	340,000
Poisson's Ratio	-	-	0.38
Izod Impact Strength, Notched @ 0.125"	ASTM D 256	ft·lbs/in	16
Izod Impact Strength, Unnotched @ 0.125"	ASTM D 256	ft·lbs/in	60 (no break)
Instrumented Impact, 0.125"	ASTM D 3763	ft·lbs	47
Thermal			
Coefficient of Thermal Expansion	ASTM D 696	in/in/°F	3.75 x 10-5
Heat Deflection Temperature @ 264 psi	ASTM D 648	°F	270
Heat Deflection Temperature @ 66 psi	ASTM D 648	°F	280

\*Typical Properties are not for specification purposes



# POLYCARBONATE HV

SHEET

## **Chemical Resistance\***

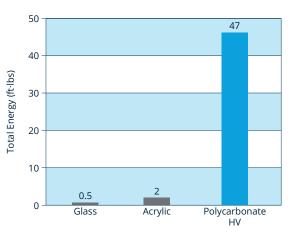
Chemical Tested	Resistance Time
Acetone	>24 hrs
Ammonia (10% concentration)	>24 hrs
Antifreeze (50/50)	>24 hrs
Benzene	>24 hrs
Bleach (Clorox concentrated)	>24 hrs
Chloroform	>24 hrs
Denatured Alcohol	>24 hrs
Di (2-ethylhexyl) phthalate	>24 hrs
Diesel Oil	>24 hrs
Isopropyl Alcohol (IPA)	>24 hrs
Kerosene	>24 hrs
Methyl Alcohol	>24 hrs
Methyl Butyl Ketone	>24 hrs
Methyl Ethyl Ketone	>24 hrs
Methylene Chloride	>24 hrs
Naphthalene, 1-bromo-	>24 hrs
Potassium Hydroxide - Lye (10%)	>24 hrs
Sodium Hydroxide (10%)	>24 hrs
Toluene	>24 hrs
Turpentine	>24 hrs
Unleaded Gasoline (87 Octane)	>24 hrs
Vinegar	>24 hrs
Xylene	>24 hrs
Acids	
Hydrochloric Acid (20%)	>24 hrs
Nitric Acid (20%)	>24 hrs
Sulfuric Acid (20%)	>24 hrs

<sup>\*</sup>Tested in accordance to ASTM D 1308-02

Always keep hazardous chemicals away from uncoated edge of Polycarbonate Sheet

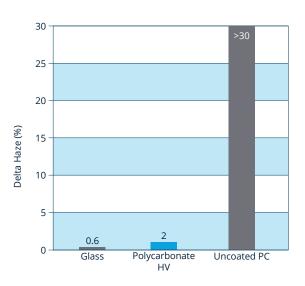


## **Impact Resistance**



\*Instrumented Impact per ASTM D 3763, sample thickness is 0.125" nominal

## **Abrasion Resistance\***



\*Taber Abrasion per ASTM D 1044, 100 cycles, CS-10F wheel