

EY

ENGINEERED
YARNS



REINFORCED ADHESIVES...

REINFORCED EVA ADHESIVES

Ethylene vinyl acetate is mainly recognized for its economy, flexibility, toughness, adhesion characteristics, and stress-crack resistance. Our product line of EVA coated yarns has been developed for a range of applications. Some primary uses of our products: packaging reinforcements, composite preforms and roofing substrate selvages.



Illustrated: composite preforms

PRODUCT INFORMATION

| STYLE NUMBER: | HM-2270 | HM-2957 | HM-3123 | HM-2819 | HM-3013 | HM-2929 | HM-3171 | HM-3141 |
|------------------------------|------------|------------|------------|------------|-----------|-----------|-----------|---------|
| Core Size: | 75 1/0 | 150 1/0 | 150 1/0 | 225 1/0 | 67 den. | 220 den. | 300 den. | 70 den. |
| Core Fiber: | Fiberglass | Fiberglass | Fiberglass | Fiberglass | Polyester | Polyester | Polyester | Nylon |
| Nominal Diameter, Inches: | 0.022 | 0.011 | 0.015 | 0.010 | 0.011 | 0.010 | 0.011 | 0.007 |
| Yield in Yards per Pound: | 2,390 | 5,790 | 4,000 | 9,720 | 11,630 | 6,800 | 5,670 | 17,220 |
| Percent Coating: | 68 | 61 | 74 | 62 | 82 | 62 | 62 | 73 |
| Grams of Adhesive per Meter: | 0.14 | 0.05 | 0.09 | 0.03 | 0.03 | 0.04 | 0.05 | 0.01 |
| Grams per Meter: | 0.200 | 0.085 | 0.123 | 0.050 | 0.042 | 0.072 | 0.087 | 0.02 |

Standards for our EVA :

| | | |
|--------------------------|---------------|-------------|
| Ball & Ring Temperature: | 185° - 200° F | ASTM E - 28 |
| Adhesive Set Time: | 2 | Seconds |
| Adhesive Open Time: | Up to 5 | Seconds |
| Viscosity | 325° F | 28,850 cps |
| | 350° F | 17,475 cps |
| | 375° F | 12,275 cps |
| | 400° F | 8,775 cps |



REINFORCED POLYAMIDE ADHESIVES

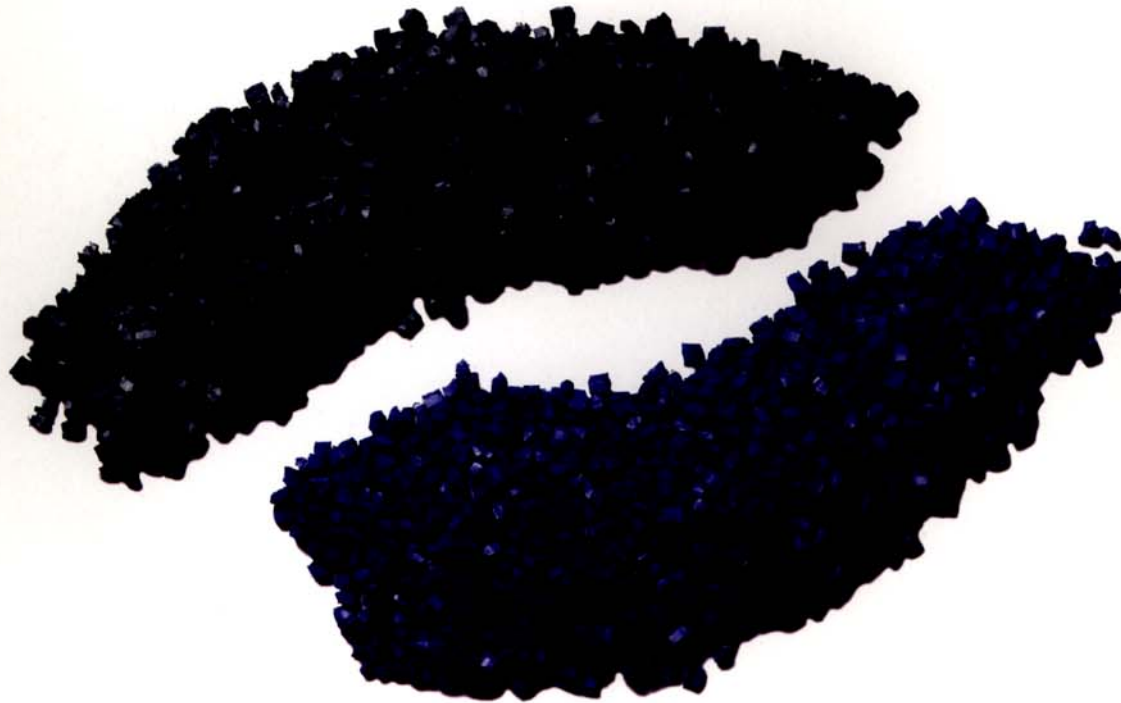
Polyamide nylon types are often referred to as high performance hot melts and are used for more demanding product assembly applications. Polyamide adhesives are well known for their ability to adhere to many types of fabrics. They have a relatively high and sharp melting point along with high shear resistance. The sharp melting point allows easy application at higher temperatures with faster bonding upon cooling. These adhesives are excellent in resistance to washing and dry cleaning solvents.

PRODUCT INFORMATION

| STYLE NUMBER: | HM-2940 | HM-2980 | HM-3088 | HM-3120 | HM-3198 | HM-3121 | HM-3192 |
|------------------------------|-----------|-----------|---------|---------|---------|----------|----------|
| Core Denier: | 70 den. | 70 den. | 70 den. | 70 den. | 70 den. | 140 den. | 200 den. |
| Core Fiber: | Polyester | Polyester | Nylon | Nylon | Nylon | Nylon | Nylon |
| Nominal Diameter, Inches: | .006 | .005 | .006 | .006 | .005 | .008 | .009 |
| Yield in Yards per Pound: | 16,390 | 21,600 | 16,200 | 18,390 | 21,260 | 12,260 | 7,780 |
| Percent Coating: | 75 | 67 | 75 | 72 | 67 | 62 | 65 |
| Grams of Adhesive per Meter: | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.04 |
| Grams per Meter: | 0.030 | 0.023 | 0.031 | 0.027 | 0.024 | 0.041 | 0.064 |

Standards for Polyamides:

| | | |
|--------------------------|--------------|-------------|
| Ball & Ring Temperature: | 280°- 300° F | ASTM E - 28 |
| Adhesive Set Time: | 2-5 Seconds | |
| Adhesive Open Time: | 75 Seconds | |
| Viscosity | 350° F | _____ |
| | 400° F | 3,480 cps |
| | 450° F | 1,610 cps |
| | 500° F | 780 cps |



**ENGINEERED
YARNS**



REINFORCED POLYESTER ADHESIVES

Polyesters offer excellent adhesion, great wash resistance, and resistance to dry cleaning solvents. Reinforced polyester adhesives also offer excellent resistance to plasticizer migration, with high tensile strengths and fast set times.

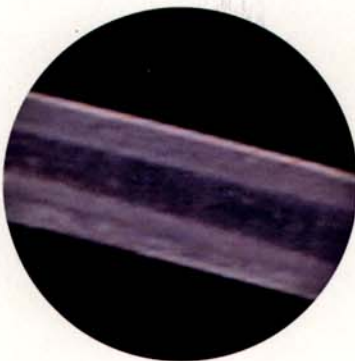
Reinforced polyester adhesive end uses cover a broad spectrum, including textile, footwear, industrial, and product assembly applications.

PRODUCT INFORMATION

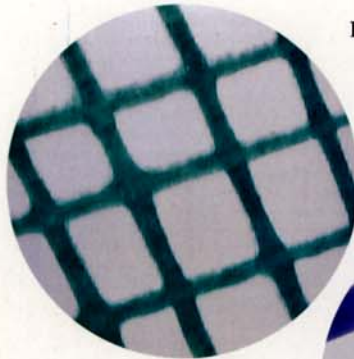
| STYLE NUMBER: | HM-3181 | HM-3293 | HM-3321 |
|-----------------------------|-----------|------------|----------|
| Core Size: | 67 den | 75 1/0 | 1500 den |
| Core Fiber: | Polyester | Fiberglass | Aramid |
| Nominal Diameter, Inches: | .013 | .020 | flat |
| Yield in Yards per Pound: | 4000 | 2340 | 2160 |
| Percent Coating: | 94 | 70 | 28 |
| Grams of Adhesive per Meter | 0.11 | 0.15 | 0.07 |
| Grams per Meter: | 0.12 | 0.21 | 0.23 |

Standards for our Polyesters :

| | | |
|--------------------------|---------------|-------------|
| Ball & Ring Temperature: | 270° – 300° F | ASTM E - 28 |
| Adhesive Set Time: | 2 – 5 | Seconds |
| Adhesive Open Time: | 45 | Seconds |
| Viscosity | 350° F | 380,000 cps |
| | 400° F | 188,500 cps |
| | 430° F | 44,000 cps |
| | 480° F | 31,500 cps |



A. Monofilament at 200X



B. At 50X magnification, this reinforced adhesive grid shows its ability to bond evenly, allowing more strength with greater ease during an application.



C. At 50X magnification, these reinforced adhesive strands show a metered amount of adhesive applied to its reinforced core. This allows for a predetermined amount of reinforced adhesive.

MONOFILAMENTS

Custom Engineered unreinforced Hot Melt Monofilaments are made up of 100% Polyester, Polyamide, and Ethylene vinyl acetate (EVA). These monofilament Hot Melts are available in various diameters. They can offer clean, efficient, and controllable applications. A great alternative to troublesome glue gun applicators.

ENGINEERED YARNS COMPANY



Engineered Yarns is a custom-engineering group providing creative answers to your industrial yarn requirements.

Our team of talented professionals is supported by highly trained and dedicated plant personnel and customer service representatives. Laboratory, testing and manufacturing facilities are located in our modern 40,000 square-foot Massachusetts headquarters. Engineered Yarns has the equipment, the technology and the experience to develop and produce efficient solutions that fit the needs of a growing list of original equipment manufacturers.

Engineered Yarns' products are linear composite materials based on man-made fiber substrates, usually treated with polymeric systems to enhance functional properties. Product end-markets include electrical equipment, paper machine clothing, transportation, telecommunications and composite industries.



**ENGINEERED
YARNS**

ENGINEERED YARNS COMPANY
Division of Pascale Industries, Inc.

Fall River Industrial Park
939 Currant Road, Fall River, MA 02720
Tel: (508) 673-3307 • Fax (508) 672-6717
Web Site: WWW.ENYARNS.COM
E-mail: ENYARNS@ENYARNS.COM

