

# STI POLYMER ELASTOMERIC COATINGS

## Highlighting Sycoat® 7626



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# ELASTOMERIC COATINGS

## Highlighting Sycoat® 7626



**Elastomeric coatings** are high-performance protective liquid applied membranes designed to provide a flexible and durable film that adheres to surfaces like masonry, wood, metal or existing membranes. Elastomeric roof coatings allow for the expansion and contraction of the substrate without cracking or losing adhesion.

### Key Features:

- ✓ Low temperature flexibility
- ✓ Crack bridging
- ✓ Waterproofing
- ✓ Durability

### Applications:

- ✓ Roof Coatings
- ✓ Concrete protection
- ✓ Below grade
- ✓ Prevent moisture intrusion



# ELASTOMERIC COATINGS

## STI Elastomeric Offerings



### Typical Physical and Performance Properties

| Property                     | Sycoat <sup>®</sup><br>EC-064 | Sycoat <sup>®</sup><br>29 | Sycoat <sup>®</sup><br>166 | Sycoat <sup>®</sup><br>7648 | Sycoat <sup>®</sup><br>7626 | Sycoat <sup>®</sup><br>7649 | Sycoat <sup>®</sup><br>84 |
|------------------------------|-------------------------------|---------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------------|
| Percent Solids               | 50                            | 55                        | 58                         | 55                          | 55                          | 55                          | 55                        |
| Polymer                      | Acrylic                       | Acrylic                   | Acrylonitrile<br>Acrylic   | Styrene<br>Acrylic          | Acrylic                     | Styrene<br>Acrylic          | Styrene<br>Acrylic        |
| Viscosity @ 25°C (cps.)      | 300 - 600                     | 300 - 900                 | 100 - 300                  | 200 - 1,000                 | ≤2,500                      | 200 - 1,000                 | 200 - 1,000               |
| pH                           | 8.0                           | 8.5                       | 6.0                        | 8.5                         | 8.5                         | 8.5                         | 8.5                       |
| Tg (°C)                      | -35                           | -22                       | -10                        | -10                         | -4                          | 0                           | 0                         |
| Density (lbs./gallon) @ 25°C | 8.5                           | 8.6                       | 8.8                        | 8.7                         | 8.5                         | 8.7                         | 8.7                       |
| Particle Size (nm)           | 170                           | 180                       | 220                        | 230                         | 100                         | 210                         | 190                       |
| Dispersion Type              | Anionic                       | Anionic                   | Anionic                    | Anionic                     | Anionic                     | Anionic                     | Anionic                   |
| APEO Free                    | No                            | Yes                       | No                         | Yes                         | Yes                         | Yes                         | Yes                       |
| Self-Cleaning                | No                            | No                        | No                         | Yes                         | Yes                         | Yes                         | No                        |

## SHINE BRIGHT , STAY CLEAN

DISCOVER THE WONDERS OF SELF - CLEANING  
WHITE ROOF POLYMERS NEWEST TECHNOLOGY

# ELASTOMERIC COATINGS

## Sycoat® 7626 TDS



## Technical Data Sheet

### Description

All-acrylic water-based polymer for barrier and elastomeric coatings

### Characteristics

- Excellent water resistance
- Low water absorption as neat polymer
- Excellent flexibility at low temperatures
- Excellent adhesion to concrete surfaces
- Low VOC
- UV Stability
- **APEO Free Product**

### Typical Physical Properties

| Property                                           | Value          |
|----------------------------------------------------|----------------|
| Percent Solids                                     | 54 - 56        |
| Polymer Type                                       | Acrylic        |
| Brookfield Viscosity @ 25°C RVT #3 @ 20 rpm (cps.) | ≤ 2,500        |
| pH                                                 | 8.0 - 9.0      |
| Tg (°C)                                            | -4             |
| MFFT (°C)                                          | ≤ 0            |
| Density (lbs./gallon) @ 25°C                       | 8.5            |
| Particle Size (nm)                                 | 100            |
| Permeability (perms)                               | 3.2            |
| Dispersion Type                                    | Anionic        |
| Appearance (wet)                                   | Milky White    |
| Odor                                               | Slight Acrylic |

# ELASTOMERIC COATINGS

## ASTM Standards



**ASTM D6083** is a standard of specifications for liquid-applied acrylic coatings used in roofing.

### Liquid Properties D6083 Standards

- **ASTM D562 = Viscosity** 85 to 141 KU
- **ASTM D2697 = Volume Solids** >50%
- **ASTM D1644 = Weight Solids** > 60%

### Commonly Tested D6083 Standards

- **ASTM D2370 = Elongation** > 100%
- **ASTM D2370 = Tensile Strength** > 200 psi
- **ASTM D624 = Tear Strength** > 60 lbf/in
- **ASTM C794 = Peel Adhesion** > 2 pli
- **ASTM D1653 = Permeance** < 50 perms
- **ASTM D471 = Water Swelling** < 20%
- **ASTM D522 = Low Temperature Flex** No Cracking (pass/fail)

# ELASTOMERIC COATINGS

## Two Pigment Volume Concentration Starting Point Formulations



| Pigment Grind       |                   | Pounds        | Gallons      | Pounds         | Gallons       |
|---------------------|-------------------|---------------|--------------|----------------|---------------|
| Water               | Carrier           | 128.0         | 15.4         | 128.00         | 15.40         |
| Propylene Glycol    | Solvent           | 10.0          | 1.2          | 10.00          | 1.17          |
| Natrosol 250 HBR    | Thickener         | 1.5           | 0.2          | 1.50           | 0.15          |
| Ammonium Hydroxide  | Buffer            | 1.0           | 0.1          | 1.00           | 0.14          |
| Tamol 165A          | Dispersant        | 5.0           | 0.5          | 5.00           | 0.54          |
| KTPP                | Dispersant        | 1.0           | 0.1          | 1.00           | 0.08          |
| Surfynol DF58       | Dispersant        | 2.0           | 0.3          | 2.00           | 0.28          |
| Mix 5 minutes       |                   |               |              |                |               |
| Ti-Pure R902        | TiO2              | 124.0         | 3.7          | 102.92         | 3.09          |
| Drikalite           | Calcium Carbonate | 355.0         | 15.7         | 294.65         | 13.05         |
| Zinc Oxide          | Extender          | 6.0           | 0.1          | 6.00           | 0.13          |
| Acticide MV14       | Preservative      | 1.0           | 0.1          | 1.00           | 0.11          |
| Polyphase 663       | Mildewcide        | 12.0          | 1.3          | 12.00          | 1.25          |
| <b>Totals</b>       |                   | <b>646.5</b>  | <b>38.7</b>  | <b>565.07</b>  | <b>35.38</b>  |
| <b>Let Down</b>     |                   |               |              |                |               |
| <b>Sycoat® 7626</b> | <b>AA Binder</b>  | 515.0         | 58.4         | 602.55         | 68.31         |
| Ammonium Hydroxide  | Buffer            | 1.5           | 0.2          | 1.50           | 0.20          |
| Surfynol DF58       | Defoamer          | 1.0           | 0.1          | 1.00           | 0.14          |
| Texanol             | Solvent           | 4.0           | 0.5          | 4.00           | 0.50          |
| Water               | Carrier           | 14.5          | 1.7          | 14.50          | 1.74          |
| Acrosol SCT 275     | Thickener         | 4.0           | 0.4          | 4.00           | 0.44          |
| <b>Final Totals</b> |                   | <b>1186.5</b> | <b>100.1</b> | <b>1192.62</b> | <b>106.73</b> |
| PVC                 |                   | 37.9%         |              | 30.2%          |               |
| WS                  |                   | 65.3%         |              | 62.1%          |               |
| VS                  |                   | 52.4%         |              | 51.1%          |               |
| # / gal             |                   | 11.9          |              | 11.2           |               |

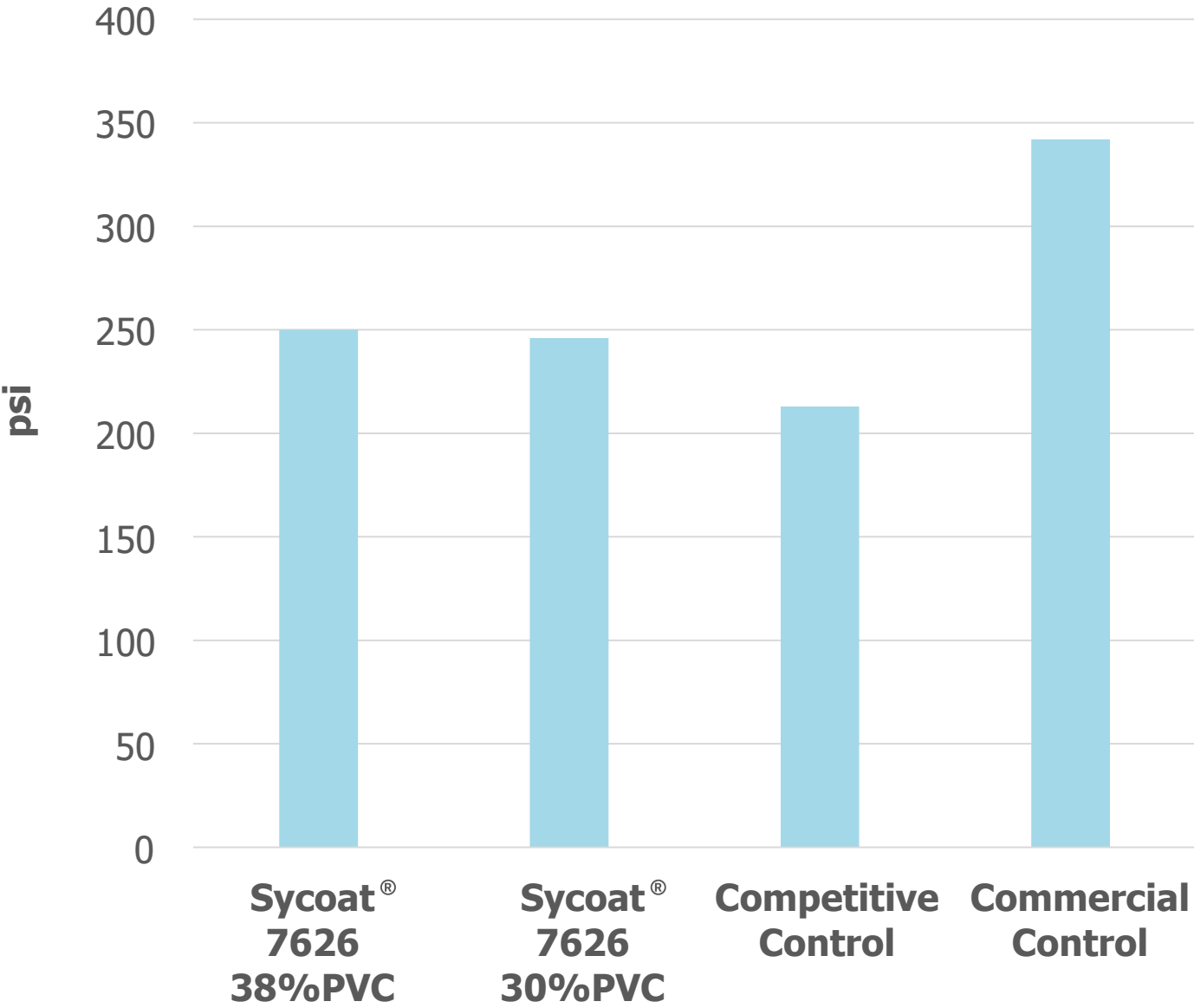
# ELASTOMERIC COATINGS

## Highlighting Sycoat<sup>®</sup> 7626



### Two Pigment Volume Concentrations Evaluated

#### Tensile Strength

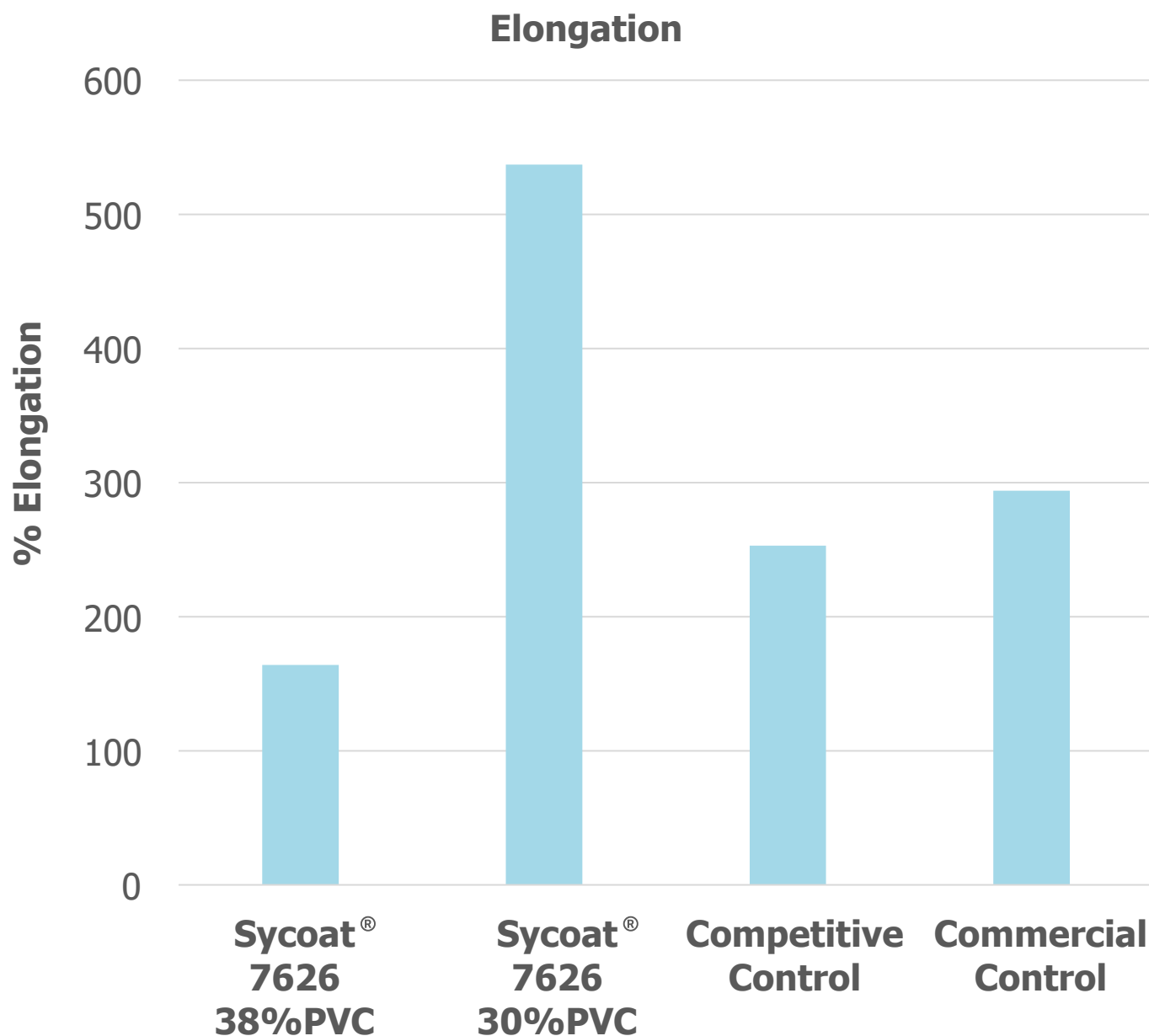


# ELASTOMERIC COATINGS

## Highlighting Sycoat® 7626



### Two Pigment Volume Concentrations Evaluated



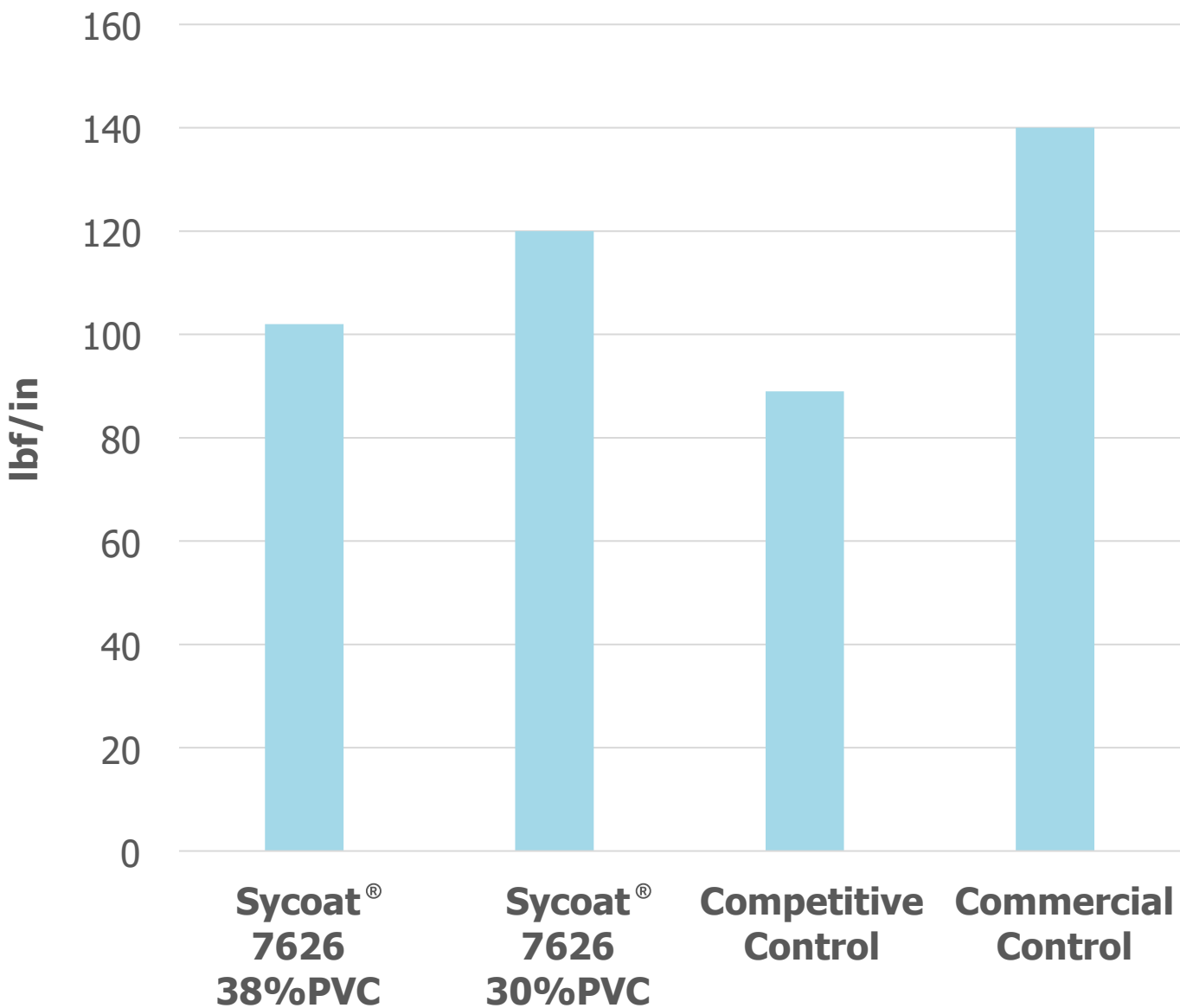
# ELASTOMERIC COATINGS

## Highlighting Sycoat<sup>®</sup> 7626



### Two Pigment Volume Concentrations Evaluated

#### Tear Strength



# ELASTOMERIC COATINGS

Two Pigment Volume Concentrations Incorporating  
15% Sycoat® 7650 a Urethane Acrylic



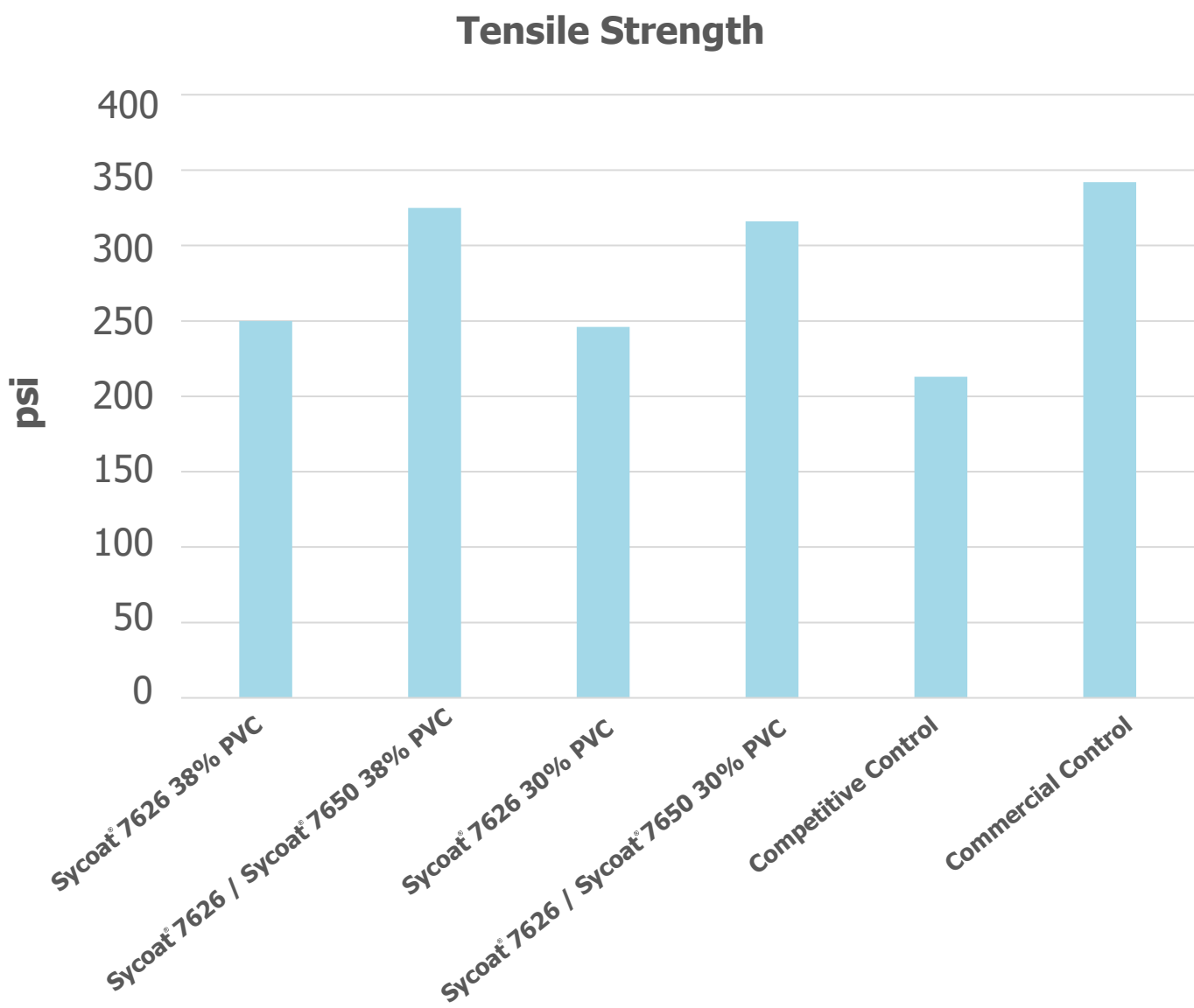
| Pigment Grind       |                   | Pounds        | Gallons      | Pounds         | Gallons       |
|---------------------|-------------------|---------------|--------------|----------------|---------------|
| Water               | Carrier           | 45.0          | 5.4          | 45.00          | 5.41          |
| Propylene Glycol    | Solvent           | 10.0          | 1.2          | 10.00          | 1.17          |
| Natrosol 250 HBR    | Thickener         | 1.5           | 0.2          | 1.50           | 0.15          |
| Ammonium Hydroxide  | Buffer            | 1.0           | 0.1          | 1.00           | 0.14          |
| Tamol 165A          | Dispersant        | 5.0           | 0.5          | 5.00           | 0.54          |
| Sycoat® 7650        | Urethane Hybrid   | 236.0         | 27.8         | 276.12         | 32.48         |
| KTPP                | Dispersant        | 1.0           | 0.1          | 1.00           | 0.08          |
| Surfynol DF58       | Defoamer          | 2.0           | 0.3          | 2.00           | 0.28          |
| Mix 5 minutes       |                   |               |              |                |               |
| Ti-Pure R902        | TiO2              | 124.0         | 3.7          | 102.92         | 3.09          |
| Drikalite           | Calcium Carbonate | 355.0         | 15.7         | 294.65         | 13.05         |
| Zinc Oxide          | Extender          | 6.0           | 0.1          | 6.00           | 0.13          |
| Acticide MV14       | Preservative      | 1.0           | 0.1          | 1.00           | 0.11          |
| Polyphase 663       | Mildewcide        | 12.0          | 1.3          | 12.00          | 1.25          |
| <b>Totals</b>       |                   | <b>799.5</b>  | <b>56.5</b>  | <b>758.19</b>  | <b>57.88</b>  |
| <b>Let Down</b>     |                   |               |              |                |               |
| <b>Sycoat® 7626</b> | <b>AA Binder</b>  | 360.0         | 40.8         | 421.20         | 47.75         |
| Ammonium Hydroxide  | Buffer            | 1.5           | 0.2          | 1.50           | 0.20          |
| Surfynol DF58       | Defoamer          | 1.0           | 0.1          | 1.00           | 0.14          |
| Texanol             | Solvent           | 4.0           | 0.5          | 4.00           | 0.50          |
| Water               | Carrier           | 14.5          | 1.7          | 14.50          | 1.74          |
| Acrosol SCT 275     | Thickener         | 4.0           | 0.4          | 4.00           | 0.44          |
| <b>Final Totals</b> |                   | <b>1186.5</b> | <b>100.3</b> | <b>1204.39</b> | <b>108.67</b> |
| PVC                 |                   | 37.6%         |              | 30.0%          |               |
| WS                  |                   | 65.3%         |              | 61.5%          |               |
| VS                  |                   | 52.7%         |              | 50.6%          |               |
| # / gal             |                   | 11.8          |              | 11.1           |               |

# ELASTOMERIC COATINGS

## Highlighting Sycoat® 7626 with Sycoat® 7650 a Hybrid Urethane



### Two Pigment Volume Concentrations Incorporating 15% Sycoat® 7650 a Urethane Acrylic

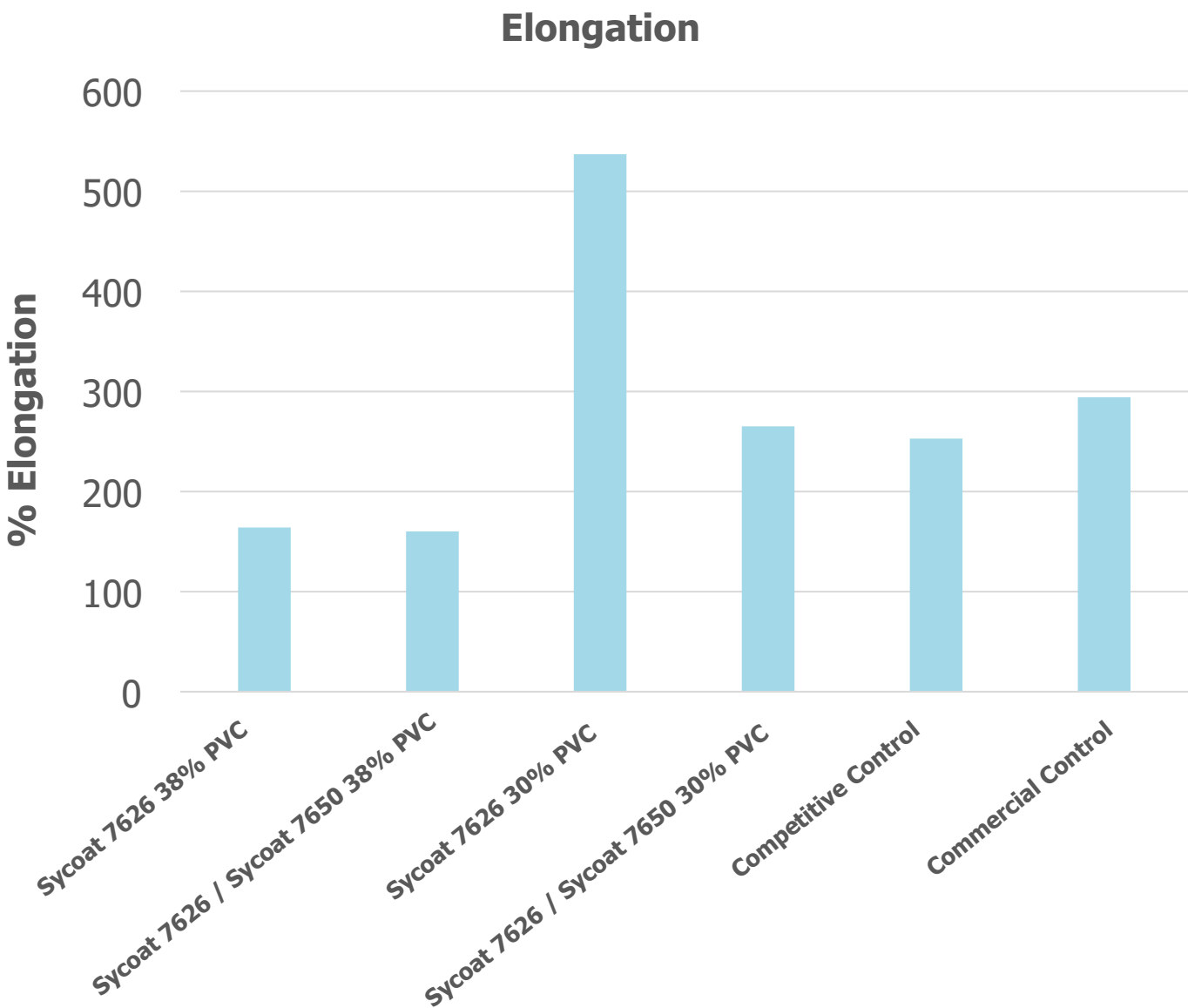


# ELASTOMERIC COATINGS

Highlighting Sycoat<sup>®</sup> 7626 with Sycoat<sup>®</sup> 7650 a Hybrid Urethane



Two Pigment Volume Concentrations Incorporating  
15% Sycoat<sup>®</sup> 7650 a Urethane Acrylic

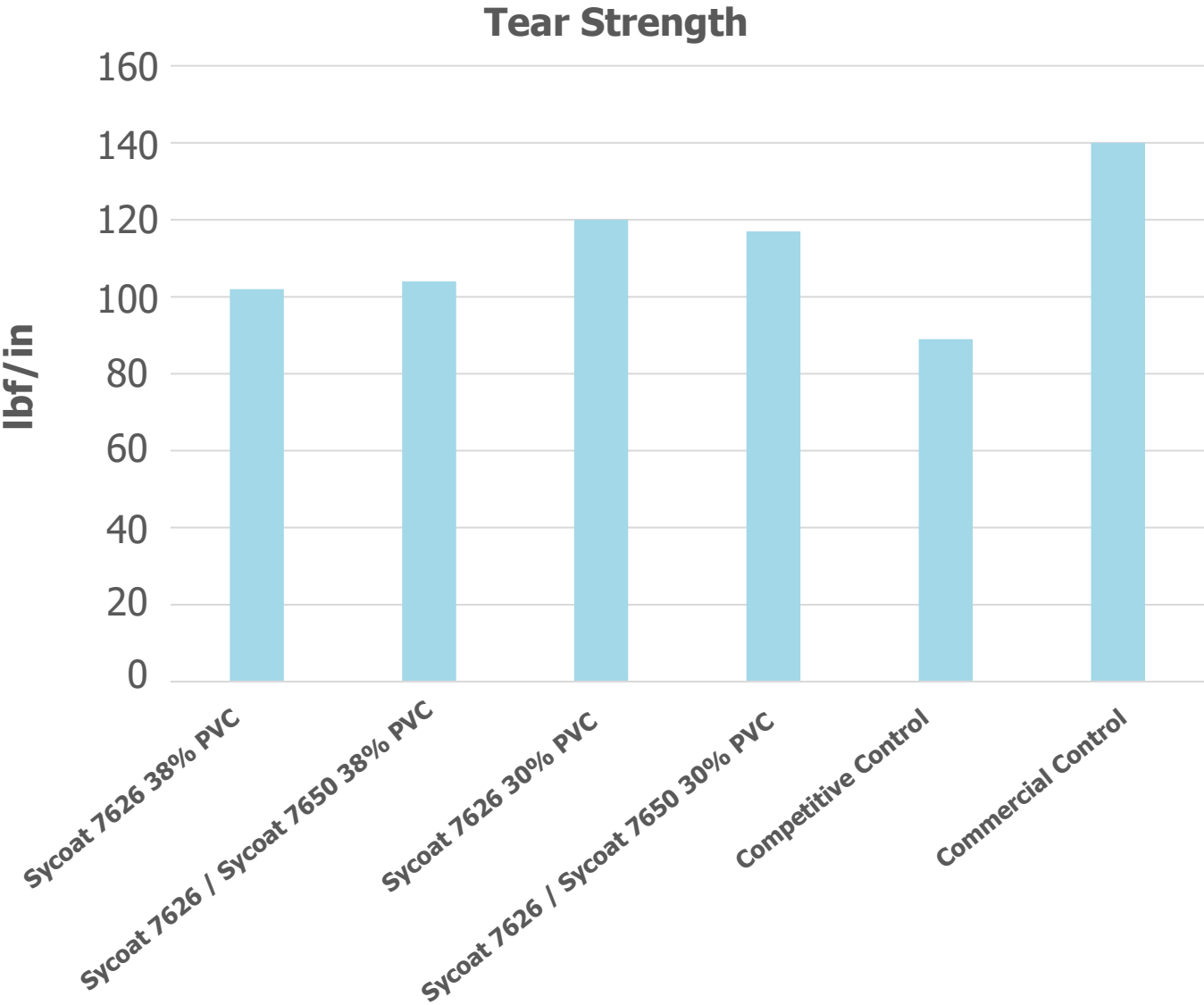


# ELASTOMERIC COATINGS

Highlighting Sycoat<sup>®</sup> 7626 with Sycoat<sup>®</sup> 7650 a Hybrid Urethane



Two Pigment Volume Concentrations Incorporating  
15% Sycoat<sup>®</sup> 7650 a Urethane Acrylic



# ELASTOMERIC COATINGS



## Conclusion

**Sycoat® 7626** is a high-performance elastomeric emulsion designed specifically for cool white roofing applications, delivering exceptional durability, flexibility, and compliance with **ASTM D6083** standards. When blended with our innovative urethane hybrid **Sycoat® 7650**, **Sycoat® 7626** demonstrates enhanced performance properties achieving the ultimate in durability.

While ongoing testing continues to validate **Sycoat® 7626**'s full potential, the synergy between **Sycoat® 7626** and **Sycoat® 7650** represents a forward-thinking solution for demanding roofing applications. This combination underscores our commitment to advancing product performance and meeting the evolving needs of our customers.