

# Polybond<sup>™</sup> 3029

**Polymer Modifier** 

**POLYBOND<sup>™</sup> 3029** is a maleic anhydride modified high density polyethylene.

## CAS Number 25213-02-9

#### Typical Physical Properties of POLYBOND<sup>™</sup> 3029

Property	Typical Value	Test Based On
Appearance	Off-white Pellet	Visual
Melt Flow Rate @ 190°C, 2.16Kg	4.0 g/10 min	ASTM D-1238
Maleic Anhydride Content	Very High*	ASTM D-6047
Density @ 23°C	0.95 g/cm <sup>3</sup>	ASTM D-792
Bulk Density	0.6 g/ cm <sup>3</sup>	ASTM D-1895B
Melting Point	130°C	DSC

\* Very High = Maleic Anhydride Content typically in the range of 1.3 to 1.7%.

## Applications

- High functionality making this product ideal for use as a coupling agent in wood polyethylene composites where reduced water uptake and higher strength properties are required
- Coupling agent for glass-filled polyethylene providing improved physical properties including strength
- Compatibilizer for polyethylene/polyamide blends giving enhanced hydrolytic stability and strength properties
- Coupling agent for polyethylene composites with high mineral filler levels offering improved strength and impact properties
- Coupling agent and process aid for halogen-free, flame retardant (HFFR) wire & cable compounds giving improved dispersion of flame retardant along with improved mechanical properties

## **Food Contact**

For details please contact SI Group Regulatory Affairs

SI Group Inc., 2750 Balltown Road, Schenectady, NY 12309 PH: +1 518.347.4200 www.siigroup.com

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Mar 2019



#### **Storage & Handling Precautions**

Keep **POLYBOND<sup>™</sup> 3029** dry prior to processing. Loss of anhydride functionality may occur due to conversion to acid groups by reaction with atmospheric moisture. Tie liners of open boxes when not in use to prevent exposure to moisture. If exposure occurs, **POLYBOND<sup>™</sup> 3029** can be dried in a hopper dryer or oven for three hours at 95-100°C to remove moisture. A slight pungent odor is normal during processing of **POLYBOND<sup>™</sup> 3029**. Purge equipment with polyethylene before and after running **POLYBOND<sup>™</sup> 3029**.

For additional handling and toxicological information consult the SI Group Material Safety Data Sheet

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