#### DOW CORNING

# Product Information Vinyl Functional Silanes

## Dow Corning® Z-6300 and Z-6518 Silane

#### **FEATURES**

- Reactive in free radical chemistry
- Reactive in hydrosilation chemistry
- Forms siloxane crosslinks via moisture cure
- Bonds with inorganic surfaces through alkoxysilane groups

#### **BENEFITS**

- Provides coupling between inorganic surfaces (such as clay, glass, etc.) and organic rubber and plastic
- Provides moisture crosslinking sites when grafted into polyethylene polymer backbone

#### **COMPOSITION**

• Vinyltrimethoxysilane (Dow Corning® Z-6300)

• Vinyltriethoxysilane (Dow Corning® Z-6518)

#### Vinyltrialkoxysilane coupling and crosslinking agents

#### **APPLICATIONS**

- Coupling agents in filled rubber compounds
- Coupling agents in reinforced/filled plastics
- Crosslinking site in polyethylene
- Reactant in siloxane polymer synthesis

#### TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

#### Dow Corning® Z-6300 Silane

Test	Unit	Result
Color, APHA		25 Max
Specific Gravity at 25°C		0.97
Viscosity at 25°C	$\text{mm}^2/\text{s}$ (cst)	0.56
Boiling Point	°C/°F	125/256
Purity by GC	%	99.0

#### Dow Corning® Z-6518 Silane

Test	Unit	Result
Color, APHA		100 Max
Specific Gravity at 25°C		0.903
Viscosity at 25°C	$mm^2/s$ (cst)	0.7
Boiling Point	°C/°F	162/324
Chloride content	ppm	10 Max
Silane dimer	%	2 Max
Purity by GC	%	95.0

#### DESCRIPTION

Dow Corning® Z-6300 Silane and Dow Corning® Z-6518 Silane are organofunctional reactive silanes. The products have a vinyl reactive organic group and a trimethoxysilyl or triethoxysilyl reactive inorganic group. Dow Corning® Z-6300 Silane has the chemical formula:

H<sub>2</sub>C=CHSi(OCH<sub>3</sub>)<sub>3</sub>

which is designated as vinyltrimethoxysilane. *Dow Corning*® Z-6518 Silane has the chemical formula:

H<sub>2</sub>C=CHSi(OCH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>

Which is designated as vinyltriethoxy-silane.

#### HANDLING PRECAUTIONS

The methoxysilane will hydrolyze when combined with water to form methanol. The ethoxysilane will hydrolyze when combined with water to form ethanol.

Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The material safety data sheet is available on the Dow Corning website at www.dowcorning.com. You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

### USABLE LIFE AND STORAGE

When stored at temperatures below 35°C (95°F) in airtight containers, *Dow Corning*<sup>®</sup> Z-6300 Silane and *Dow Corning*<sup>®</sup> Z-6518 Silane both have shelf lives of 36 months from date of manufacture.

#### **LIMITATIONS**

These products are neither tested nor represented as suitable for medical or pharmaceutical uses.

#### HEALTH AND ENVIRONMENTAL INFORMATION

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, www.dowcorning.com or consult your local Dow Corning representative.

#### LIMITED WARRANTY INFORMATION - PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Dow Corning's products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

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Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

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