

# WSC1068

Weatherstrip Coating

# **Description**

WSC1068 Weatherstrip coating is a 2-component system that thermally cures to form a high abrasion resilient silicone film. The cured coating can help to provide substrate surfaces such as EPDM rubber with lubricating water repellency and easy release characteristics. WSC1068 coating is an excellent candidate to consider for coated surfaces such as automotive primary and secondary door seals and cabriolet seals where a smooth surface is preferred to impart high abrasion resistance while retaining a good low friction dark grey matt appearance.

### **Key Features and Typical Benefits**

- Excellent freeze release characteristics
- Perfectly matched EPDM rubber colour and even appearance
- Low Static, Dynamic CoF, and smooth transition for low noise generation
- Excellent abrasion resistance
- Excellent adhesion to EPDM and other rubber types
- Wide process window
- Supplied as pre-weighed components for ease of formulation
- Tin and Isocyanate content free formulation

# **Typical Physical Properties**

Property	WSC1068A Base	WSC1068B
	Emulsion	Crosslinker
	Unit	Typical Value
Colour	Black	Pale Yellow
Solids Content (%)	30	41

Density (at 25C)	1.01	1.03
Viscosity (mPas) Brookfield #2 30	80	90
rpm		
Solvent	Water	Water

<sup>.</sup>Typical properties are average data and are not to be used as or to develop specifications.

## **Typical Cured Product Properties**

Property	WSC1068
Colour	Dark Grey /Black
Appearance	Matt
Abrasion Resistance (Crockmeter 9N load)	> 10,000 cycles
Friction Coefficient	< 0.3 Static & Dynamic
Ice /Freeze release	Excellent

<sup>.</sup>Typical properties are average data and are not to be used as or to develop specifications.

# **Typical Cure Schedule**

Complete cure in any specific application is a function of coating thickness, part geometry and the heat transfer characteristics of the substrate to which the coating is being applied.

Although the prepared coating will cure at an ambient temperature, it is not recommended as the adhesion and full abrasion performance may not be realized. An absolute minimum part temperature of 120°C at the point of application is recommended to achieve the full coating performance.

Part Temperature (actual not oven set				
point)				
Cure Temperature (°C)	180°C	150°C	100°C	80°C
Cure Time (at temperature)	1 minute	2 minutes	5 minutes	10 minutes

### **Sample Coating System Preparation**

The following sample formulation is provided as a suggested starting point for spray

### applications.

Component	Loading by Weight	
WSC1068 A	100 parts	Supplied as 16Kg Pail
WSC1068 B	3.75 Parts	Supplied as 600g can
Water (if required)	0 – 200 parts	

#### **General Considerations for Use**

The coating is supplied as pre-weighed components (WSC1068A and WSC1068B) it is important to thoroughly mix the A component to ensure any settled ingredients are well re-dispersed before use. Then add the crosslinker and water as required <sup>2</sup>. The coating is now ready to use.

For optimum coating adhesion and performance, ensure all surfaces are clean and dry before applying the coating solution. The substrate temperature should be between 80 – 230°C for on-line application and a minimum of 80°C part temperature at the time of coating for off-line applications.

WSC1068 weatherstrip coating is recommended to be spray coated.

It is important to apply sufficient material to achieve an initial wet look in order to help ensure continuous coverage and good coating adhesion. It is also possible to employ multiple spray heads in tandem in order to help ensure sufficient coating is applied and no areas are left uncoated during the application process.

Typical bath life is 24 - 36 hours in an open container and can be up to 3 days in a closed container. Continuous slow speed agitation of the coating bath is recommended to reduce the possibility of settling of the matting agents and friction modifiers.

The resulting coating thickness will depend on the application method and the required end-use requirements.

Dry film thicknesses are typically between 6 and 10 microns.

<sup>1</sup>Product formulations are included as illustrative examples only. Momentive makes no representation or warranty of any kind with regard to any such formulations, including, without limitation, concerning the efficacy or safety of any product manufactured using such formulations.

<sup>2</sup> Further dilution with water may be desired according to the temperature, type of substrate,required dry film thickness, and application method. The final formulation needs to be established by trials on the end user's production equipment.

### **Current Packaging**

WSC 1068 A 20 Litre pail filled with 16Kg WSC1068 B 1 Litre can filled with 600g

#### **Patent Status**

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

### **Product Safety, Handling and Storage**

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

WSC 1068 weatherstrip coating components have a shelf life of 24 months from date of manufacture when in unopened containers under suitable storage conditions (>2°C and <43°C)

#### Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

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