

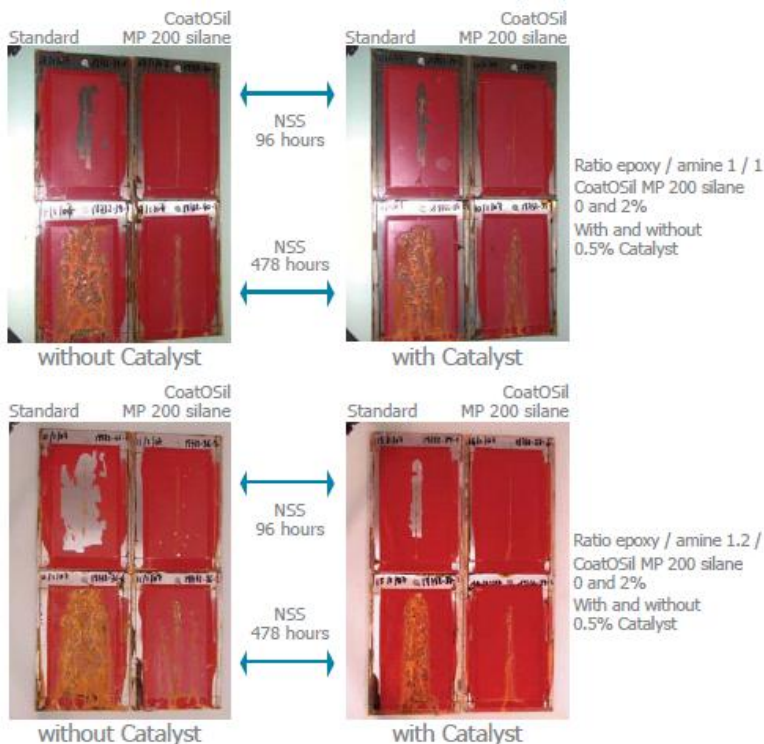
## CoatOSil\* MP 200

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#### Description

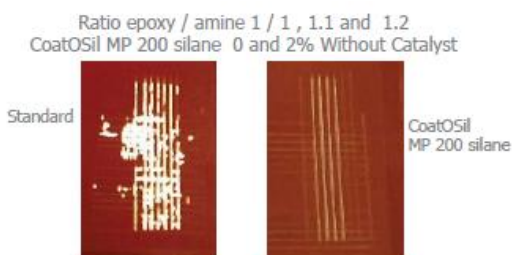
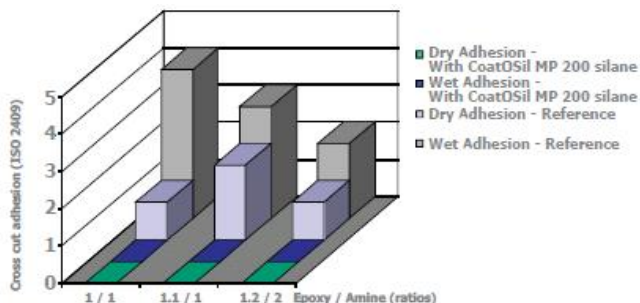
CoatOSil MP 200 silane is an epoxy functional silane oligomer that may be considered for use as an adhesion promoter or binder in polysulfide, urethane, epoxy and acrylic caulks, sealants, adhesives and coatings. The product is a polyfunctional structure bearing gamma-glycidoxy groups, which is an excellent candidate to consider to reduce emissions of methanol upon hydrolysis of the material as compared with monomeric epoxy silanes. It typically aids adhesion promotion and crosslinking of water borne or solvent based coatings as well as dispersion of metallic pigments in water borne systems.

#### Corrosion Resistance - Neutral Salt Spray



CoatOSil MP 200 silane can help significantly increase the corrosion resistance of 2K HS epoxy primer. It can lower the impact of epoxy/amine ratio and catalyst content.

### Cross Cut Adhesion ISO 2409-1972



CoatOSil MP 200 silane can help significantly increase the adhesion performances of 2K HS epoxy primer.

### Key Features and Benefits

The gamma-glycidoxy propyl epoxide ring available in CoatOSil MP 200 silane can react with many different organic functionalities, while the alkoxy silane groups still available on the oligomeric structure typically bond strongly to inorganic substrates. The hydrolytic stability of CoatOSil MP 200 silane can help provide better shelf life than normal monomeric silanes, thus providing better durability in solvent borne systems. Specific hydrolysis conditions can be applied to hydrolyze the material so CoatOSil MP 200 silane may be considered for use in waterborne systems.

### 2K HS Epoxy Paint Pigment Paste Preparation

<b>Red Iron Oxide Dispersion Paste</b>	
<b>Material</b>	<b>Weight (parts)</b>
Epoxy Resin (EEW; 3.8-4.25 mmole/g)	26.91
Antifoam	0.41
Dispersing Agent	0.54
Mix first part prior to pigment dispersion – introduce under dispersion	
Red Iron Oxide	26.16
Anticorrosive Pigment	5.58
Kaolin Clay	11.77
China Clay	11.77
Barium Sulfate	7.68
Dispersion 1500 rpm / 30 minutes, max. temp. 40°C – Hegmann Gauge = 5	
Total	81.38

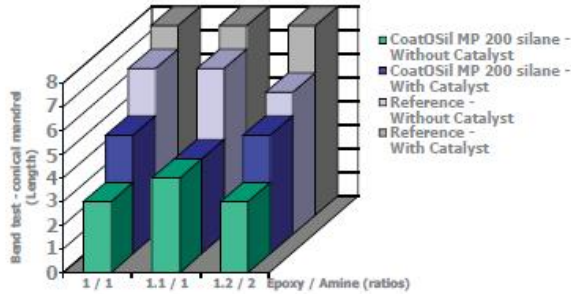
**2K HS Epoxy Paint Formulation**

<b>High Solid Epoxy Paint</b>	
<b>Material</b>	<b>Weight (parts)</b>
Red Iron Oxide Dispersion Paste	81.38
Epoxy Resin (EEW; 3.8-4.25 mmole/g)	2.75 to 4.75
CoatOSil MP 200 silane	0, 1 or 2
Mix first part – introduce under dispersion	
Methyl Ethyl Ketone	3.12
1 Methoxy-2-propanol	0.78 to 1.56
Xylene	0 to 1.53
Part A: Mixing 600 rpm	
Curing Agent	7.66 to 9.47
Ratio (Epoxy Resin + CoatOSil MP 200 silane) / Amine: 1, 1.1 or 1.2	
Amine Catalyst	0 or 0.5

Typical data are average data and actual values may vary. Typical data shall not be used as product specifications.

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

**Bend Test - Conical Mandrel ISO 6860-1984**



Ratio epoxy / amine 1 / 1 to 1.2  
CoatOSil MP 200 silane 0 and 2% With or without 0.5% Catalyst



CoatOSil MP 200 silane can help improve bending resistance of 2K HS epoxy primer. It can minimize impact of accelerating catalyst on bending resistance.

### Typical Physical Properties

Properties	Typical Impact of CoatOSil MP 200 silane
Dry adhesion (cross cut)	Improved
Wet adhesion; (cross cut after immersion test)	Improved
Hardness	No impact
Impact resistance (Reverse)	Improved
Bending resistance (Conical mandrel)	Improved
Corrosion resistance (NSS)	Improved

### Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the 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](http://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.

### **Limitations**

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

### **Contact Information**

For product prices, availability, or order placement, contact our customer service at [Momentive.com/Customerservice/](https://www.momentive.com/Customerservice/)

For literature and technical assistance, visit our website at: [www.momentive.com](https://www.momentive.com)

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