

Technical Data Sheet

#### **DIRTSHIELD™ 905 Acrylic Mineral Hybrid Binder**

For Exterior Masonry

# Regional Product Availability

**EMEA** 

#### **Description**

DIRTSHIELD™ 905 Acrylic Mineral Hybrid Binder is an innovative acrylic hybrid binder designed to offer excellent outdoor durability in particular excellent dirt pick up resistance, color retention and efflorescence resistance while maintaining good flexibility.

DIRTSHIELD™ 905 Acrylic Mineral Hybrid Binder is an APEO-free\* self-film forming binder that can easily be formulated in a wide range of PVC.

### Characteristics of the Product

- Self-film forming
- Alkyl phenol ethoxylate-free\*
- Formaldehyde-free\*
- Very good dirt pick up resistance
- Very good colour retention
- Very good efflorescence resistance
- \* APEO and Formaldehyde are not intentionally added and and are not knowingly introduced from another raw material.

#### **Typical Properties**

(These properties are typical but do not constitute specifications).

Typical Physical Properties	Typical Values
Appearance	Milky liquid
Solids content	~ 45 %
Viscosity (LVT, 2#, 60 rpm, 25°C)	1000 cPs max.
pH	~10.5
Density (wet)	1.1 g/cm3
Density (dry)	1.26 g/cm3
Minimum Film Formation Temperature	~ 5°C

# Formulation Guidelines

# Masonry Coating based on DIRTSHIELD™ 905 Acrylic Mineral Hybrid Binder MAS-905-48-1

Materials	Kilo	Liter	Level
Grind			
Water	92.4	92.4	
CELLOSIZE™ QP-4400H HEC	2.0	1.5	
AMP-95 Neutralizer	0.7	0.8	
OROTAN™ 731A ER Dispersant	16.0	14.4	1.0 % Disp
Calgon 332N water softener	1.0	0.3	0.25 % Disp
Dow Corning® 111F Additive	3.0	3.0	
Kronos 2310 Titanium dioxide	180.0	44.0	15.5%PVC
Talc OXO Extender	45.0	16.6	5.5 % PVC
Durcal 5 Extender	55.0	20.0	7.1 % PVC
Calibrite SL Extender	65.0	23.6	8.4 % PVC
Grind Sub-total	460.1	216.6	36.5 % PVC
Let Down			
DIRTSHIELD™ 905 Acrylic Mineral Hybrid Binder	466.0	423.5	6.0% PVC
ROPAQUE™ ULTRA E Opaque Polymer	30.	29.3	5.6 % PVC
AMP-95 Neutralizer	1.5	1.7	
Dow Corning® 111F Additive	1.0	1.0	
UCAR™ Filmer IBT	5.4	5.7	2.5 % Coal
ACRYSOL™ RM-825 Rheology Modifier	4.0	3.9	
ACRYSOL™ RM-2020E Rheology Modifier	24.0	23.0	
BIOBAN 350 PST Biocide	7.0	6.4	
ROCIMA MB2X Biocide	1.0	1.0	
Totals	1000.0	712.1	48.1%

#### **Paint Properties**

41.8%
57.4%
1.388
1.25%
2.5%
9.6 - 9.8

#### **Viscosities**

Krebs Stormer (KU) 128 – 132 ICI (Poise) 1.4 – 1.6

#### **Handling Precautions**

Before using this product, consult the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage.

#### **Storage**

Store products in tightly closed original containers at temperatures recommended on the product label.

## Disposal Considerations

Dispose in accordance with all local or national regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state or national regulations. Contact your Dow Coating Materials Technical Representative for more information.

#### **Chemical Registration**

Many countries within EMEA require the registration of chemicals, either imported or produced locally, prior to their commercial use. Violation of these regulations may lead to substantial penalties imposed upon the user, the importer or manufacturer, and/or cessation of supply. It is in your interests to ensure that all chemicals used by you are registered. Dow does not supply unregistered products unless permitted under limited sampling procedures as a precursor to registration.

# Note on EMEA Product Line

Product availability and grades vary throughout the countries in the EMEA area. Please contact your local Dow Coating Materials representative for further information and samples.

#### **Product Stewardship**

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

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