



DATA SHEET

WSM4 METAL ROOF MEMBRANE

WS M4 Metal Specific Membrane is an easy-to-use, liquid-applied, waterproofing material specially designed to protect metal roof surfaces. WS M4 becomes an integral piece of a substrate. It bonds well and increases durability and protection for any metal surfaces. It has a unique molecular structure, that allows for substrate movement, and accommodation for sudden temperature fluctuation, is able to perfectly utilize its tensile strength and elongation abilities and allow the substrate to breathe, preventing damage from moisture and air born pollutants, including fungi, mold, and bacteria. All application is by experienced, independent certified applicators.

WS M4 Metal Specific Application Membranes provide superior coverage on steel roofs. Standard colors are black, white, and grey. With specialty colors available, depending on minimum lead times and volume.

USES

WS M4 Metal Specific Application Membrane becomes an integral piece of the roof or metal substrate that it is applied to.

- Roofing substrates based from metal or aluminum
- Walls, vertical, metal or aluminum
- By reducing maintenance costs and building up keep
- Prolonged protection of substrate
- Rejuvenate old or worn surfaces
- Resists UV radiation
- Prevents future leakage or moisture intrusion

FEATURES

- High performance and excellent coverage
- Reduced thermal shock of coating relating to rapid temperature fluctuations
- Excellent tensile strength and elongation abilities
- Bridges hairline cracks up to 1/16"
- Water, fade, UV resistant
- Strong, rubbery coating seals and water-proofs hairline cracks seamlessly
- Resistant to mildew, fungus, moss, and algae growth
- Highly breathable
- Resistant to harsh conditions due to exhaust gases, acid rain, and airborne pollutants



GENERAL DATA

Type	Acrylic Elastomeric
VOC	Less than 23 g/L
Volume Solids	63% (varies by color)
Coverage	160-200 ft./gallon @ 12 mils DFT
Film Thickness (dry)	14-16 mils per gallon
Number of Coats	Two coats
Viscosity	20,000 CPS @ 6RPM
Flash Point	N/A
Finish	Flat
Surface Temperature at Application	Min. 5°C/42°F Max. 35°C/95°F
Thin With	Do not thin
Water Vapour Transmission	2.9 perms (ASTM E98-80BW)
Tensile Strength	130 psi @ WFT 13 mills (ASTM D412)
Elongation	310% (ASTM D412)
Fire Resistance Rating (for FR)	10 (ASTM E84-01)
Storage Temperature	Max. 5°C/41°F Max. 32°C/90°F

Surface Preparation

For new surfaces (shop applications) of WS M4, ensure that the surface is clean, dry, stable, and free of any dust, dirt, oil, grease and loose particles. Remove surface contaminants by power washing and allow to dry before applying.

For field application and repairs using WS M4, ensure that the surface is clean, dry, stable and free of any dust, dirt, oil, grease and loose particles. Remove surface contaminants or detergents by power washing and allow to dry before applying. Treat cracks and holes as with new construction.

Application Process

WS M4 Metal Specific Application is ready to use straight from the container, eliminating the need for other paints or solvents. Thoroughly stir before application while using care to prevent excessive entrapment of air. WS M4 may be applied using an airless spray, power roller, or conventional roller. Do not apply to surfaces with excessive moisture content, such as during damp or rainy weather. Do not apply in temperatures below 5°C (42°F).

Apply in liberal coats and check application using a wet film gauge to ensure the minimum wet film thickness is obtained. To adequately seal, work product well into crevices and holes. To finish, back roll in a downward motion, or cross that with airless sprayer.



Power Roller

Apply product generously and frequently monitor application using a film thickness gauge to maintain proper wet film thickness.

Conventional Roller

Keep roller saturated with material and apply product in two crosshatch coats at right angles and frequently monitor application using a film thickness gauge to maintain proper wet film thickness. Allow the first coat to dry for a minimum of 3 hours or until surface dries, prior to a second application. Finish in a downward motion using a dry roller.

Airless Spray

Generously apply in a crosshatch pattern and back roll to prevent a pinhole surface and frequently monitor application using a film thickness gauge to maintain proper wet film thickness. Use equipment that can maintain a 2,500 to 3,500 psi at the tip.

- **Orifice size: 0.019" (0.48 mm) to 0.023" (0.58 mm)**

Drying time WFT @ 50% R.H.

GENERAL DATA

SUBSTRATE TEMP.	RECOAT AFTER	FULL CARE
5°C/41°F	5 hours	24 hours
10°C/50°F	3-5 hours	15 hours
20°C/68°F	0.5 hours	9 hours



Thinning/Cleanup

Do not use thinners as it will reduce the sealing ability of the product. Do not add other paints or solvent with this product. Wash all equipment in a warm detergent solution then rinse with water. Spray equipment's should be given a final rinse using mineral spirits to prevent rusting. Use completely or properly dispose. Please follow local disposal requirements. Refer to you local environmental agencies for more information on disposal options. Recycle any empty containers.

Environmental and Safety Information

Avoid contact with eyes, prolonged or repeated contact with skin, and inhaling vapours, spray mist or sanding dust. Use product with adequate ventilation. Wear eye protection and gloves during application or sanding. When sanding or spraying, a dust/ particulate respirator approved by NIOSH must be worn. Close container between uses.

First Aid

Periodically move to fresh air to minimize any effects by inhalation of vapors and spray mist. In case of eye contact, rinse immediately with water for 15 minutes and consult a physician. For skin contact, wash thoroughly with soap and water. In case of ingestion, seek medical aid immediately—refrain from physically expelling product by vomiting.

Spills

Absorb any spilled products using an inert material. Follow the instructions specified in Thinning/Cleanup.

Shelf Life

Unopened, WS M4 has a shelf life of 6 months.

Limitations

- **Do not use for immersion service**
- **Below grade applications have not been tested for WS M4**

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Packaging

WSM4	5 USG pails
	55 USG drum
	244 USG totes (fill weight 1236 kg)

Warranty Disclaimer

We guarantee our Products adhere to the specifications of Weatherskin Coatings. Weatherskin Coatings makes no warranty or guarantee, expressed or implied, including warranties of fitness for a particular purpose or merchantability, respecting its Products. Liability, if any, is limited to refund or purchase price or replacement of the Product. All consequential damages, labor and cost of labor are hereby excluded.



WSM4 METAL ROOF

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

1.1 Product identifier

Trade name	WSM4 METAL ROOF
Chemical name	Water-based elastomeric coating

1.2 Recommended use of the product and restrictions on use

Recommended use	Industrial Use
Non- recommended use(s)	None known

1.3 Details of the supplier of the safety data sheet

Company	Weatehrskin Corporation. Bay B 1120 44th Avenue SE Calgary, Alberta. Canada T2G 4W6
Telephone	403 656 9244
Toll Free	1 877 693 9224
Website	www.weatherskin.com

1.4 Emergency telephone number

Emergency In case of emergency call CANUTEC	613-996-6666
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2. HAZARD IDENTIFICATION

2.1 Classification of the mixture

Very thick opaque liquid, paint odor.

2.1.1 Health Hazards	Skin Corrosion / irritation Category 3. • Causes Mild Skin Irritation Serious Eye Damage / Eye Irritation Category 2B. • Causes Eye Irritation
2.1.2 Environmental Hazards	Harmful to aquatic life
2.1.3 Other Hazards Caution	Spillages may be slippery
2.1.4 Hazards summary Irritating to eyes and skin	May cause irritation to the respiratory system. Harmful to aquatic life

2.2 Label Elements

Signal word	Warning
Hazard statement	H316: Causes mild skin irritation H320: Causes eye irritation H402: Harmful to aquatic life
Precautionary Statements	Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair)	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing



3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

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3.2 Mixtures

WSM4 METAL ROOF

HAZARDOUS INGREDIENTS C.A.S.# WEIGHT %

Titanium Dioxide 13463-67-7 5 - 10

C.I. Pigment Black 7 1333-86-4 5 - 10

4 FIRST AID MEASURES

4.1 Description of first aid measures

EYE CONTACT

Rinse cautiously with eyewash solution or clean water, holding the eyelids apart for several minutes. Remove contact lenses if present and easy to do. If eye irritation persists: Get medical attention. Continue rinsing eyes during transport to hospital

SKIN CONTACT

If on skin or hair, take off immediately all contaminated clothing and shoes. Rinse skin, washing thoroughly with water. Get medical attention if irritation persists.

INHALATION

Remove patient from exposure, keep warm and at rest. Get medical attention

INGESTION

Clean mouth with water and drink afterwards a glass of water. Keep respiratory tract clear. Do not induce vomiting. Immediately call a POISON CENTER / Doctor

4.2 Indication of any immediate medical attention or special treatment needed

Note to Physicians Treat Symptomatically



5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	Dry chemical, CO ₂ , water spray or regular foam. Compatible with all standard fire fighting techniques.
Unsuitable extinguishing media	None known

5.2 Hazards

Not applicable. Aqueous solution. Non-combustible

5.3 Fire-fighting instructions

None.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures.

Use personal protective equipment. Wear chemical safety glasses, rubber boots and heavy rubber gloves. Prevent further leakage or spillage if safe to do so.

6.2 Environmental precautions

Do not allow to enter drains, waterways, sewers, basements or confined areas.
Do not discharge into the subsoil / soil. Absorb spills with inert material and place in a chemical waste container. If the product contaminates rivers and lakes or drains inform the respective authorities.

6.3 Methods and materials for containment and cleaning up

Provide adequate ventilation. Caution: Spillages may be slippery. Ventilate the area. Soak up with inert absorbent material (e.g. sand, silica gel, universal binder, sawdust) Keep in suitable, closed containers for disposal.



7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Use only in well ventilated area. Avoid breathing vapor or mist. Avoid all personal contact. Use personal protective equipment. Avoid generation of mist. Emergency shower and eye wash facilities should be readily available. Do not eat, drink or smoke at the work place.

7.2 Hygiene considerations.

Wash hands before breaks and after work. Remove soiled or soaked clothing immediately. Wash contaminated clothes before reuse. Do not eat, drink or smoke when handling this product. Remove contaminated clothing and protective equipment before entering eating areas.

7.3 Safe storage procedures

Keep at a temperature not exceeding 50 °C. Do not allow material to freeze. Keep container tightly closed. Store in cool/well ventilated place.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 EXPOSURE LIMITS

Hazardous Components (Chemical Name) Occupational Exposure Limits

Titanium Dioxide 15 mg/m³. TWA (dust total)*

C.I. Pigment Black 7 3.5 mg/m³. ACGIH TLV TWA.

* Both pigments are dispersed in a liquid phase. They are not present in solid state as dust or loose particles.



8.2 EXPOSURE CONTROLS

ENGINEERING CONTROLS

Use local exhaust ventilation to maintain airborne concentrations at safe levels. Ensure adequate ventilation, especially in confined areas. Suitable respiratory equipment should be used in cases of insufficient ventilation or where demand it.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Equipment : Respiratory protection not normally required. If exposure cannot be controlled below applicable limits, use the the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust /mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow the manufacturer's instructions.

Eye Protection	Use tightly fitting chemical splash goggles. Wear face shield if splashing hazard exists. Contact lenses should not be worn when working with chemicals because they contribute to the severity of an eye injury in case of exposure.
Hand Protection	Use impermeable gloves. Neoprene or butyl-rubber gloves
Body Protection	Use impervious clothing and chemical resistant boots. Consider using resistant coveralls and aprons, if extensive exposure is possible.
Other Protective Equipment	Ensure that eyewash stations and safety showers are close to the workstation location.
General Hygiene Consideration	Do not breathe mist or vapor. Avoid all contact. Do not eat, drink, or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Do not take contaminated clothes home.



9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State	Thick Liquid.
Color	Black, white, green, blue etc.
Odor	Slight Solvent odor.

Properties

Boiling Point	Not available
Freezing Point	Not available
Flash Point	Not available
PH	8 - 9
Specific Gravity	1.35 – 1.45 g/ cm ³
Viscosity	20.000 CPR
VOC content	Less than 30 g/L
Evaporation rate	Not applicable
Solubility in water	Soluble
Vapour pressure	Not applicable
Vapour density	No data
Auto ignition Point	Not applicable
Decomposition Temperature	Not applicable
Explosive properties	Not applicable
Oxidising Properties	No data



10 STABILITY AND REACTIVITY

Reactivity	No data available.
Chemical Stability	Stable under normal conditions
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Excessive heat, freezing.
Incompatible Materials	None known.
Hazardous decomposition products	None known.

11 TOXICOLOGICAL INFORMATION

Ingestion	Aspiration hazard. Do not ingest
Inhalation	May cause irritation of nose, throat or respiratory tract. Avoid inhalation.
Skin Contact	May cause skin irritation. Avoid skin contact.
Eye Contact	Material will cause irritation. Avoid eye contact
Skin corrosion/irritation	Irritating to skin
Serious eye damage/irritation	Irritating to eyes.
Sensitization	Not sensitizing
Carcinogens	Possible cancer hazard. Contains materials which may cause cancer based on animal data. Contains TiO ₂ which is listed by IARC as a possible carcinogen (Group 2B) based on animal data. Neither long Term animal studies, nor human epidemiology studies of workers exposed to TiO ₂ provide an adequate basis to Conclude TiO ₂ is carcinogenic. TiO ₂ is not classified as a carcinogen by NTP, U.S. OSHA or the U.S. EPA IARC has also classified Carbon Black as a possibly carcinogenic to humans (Group 2B). ACGIH-A4 Not classifiable as a Human Carcinogen.



Teratogenicity	No evidence of teratogen effects.
Reproductive toxicity	No evidence of reproductive effects.
Aspiration Hazard	No aspiration hazard expected.

12 ECOLOGICAL INFORMATION

12.1 Toxicity :Harmful to aquatic life. Carbon Black

96 hr LC50 freshwater fish > 1000 mg/L; 24 hr EC freshwater invertebrates > 5600 mg/L

12.2 Persistence and Degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in Soil

No information available.

13 DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of this material and its container to hazardous or special waste collection point. Do not discharge substance/product into sewage system. Do not contaminate pond, waterways or ditches with chemical or used container. The product should not be allowed to enter drains, water courses or the soil.



14 TRANSPORTATION INFORMATION

14.1 Identification, UN number

Water based Paint. Not Regulated

14.2 Shipping Name

14.3 Packing Group

15 OTHER INFORMATION

Waste Disposal Method

Preparation Date

April 19, 2018

SDS prepared by

Weatherskin Corp. 403 656 9244

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