

USP™ MODIFIED ASPHALT EMULSION

Product Data Sheet

Product Name: USP™ Modified Asphalt Emulsion

Classification: Asphalt Emulsion; ASTM D 1227, Non Fibered

Product Description: Designed as a spray grade water-based asphalt emulsion coating for a variety of low-slope commercial roof surfaces. It is specially designed to be used with USP™ PolyForcement Ply Sheets. USP™ Modified Asphalt Emulsion has excellent weathering qualities and is non-flammable, odorless and bonds to damp or dry surfaces. USP™ Modified Asphalt Emulsion contains no solvents so it will not deteriorate or harm insulation boards and is easy to use and clean up. **DO NOT ALLOW PRODUCT TO FREEZE.**

Approvals: Meets Federal Specifications SS-R 1781 & ASTM D-1227. Contact U.S. Ply, Inc. for specific/applicable codes.

Product Data: USP™ Modified Asphalt Emulsion (typical)

Coverage Rate: 3-5 gallons per 100 sq. ft. per coat depending on surface applied.

Vehicle Base: Asphalt

Weight: 8.6 lbs. /gal.

Solids by weight: 48 +/- 2%

Solids by volume: 50 +/- 2%

Dry Film Thickness: 7.8 mils @ 1 gal/100 sq. ft.

Viscosity: 105 ± 5KU @ 77°F (nominal)

Ductility of Base Asphalt @ 77°F: 50 min.

Specific Gravity: 1.03

VOC: 0 grams/liter

Carrier: Water

SHIPPING INFORMATION:

<u>Container Size</u>	<u>Gross Weight</u>	<u>Class</u>
5 Gal.	47 Lbs.	55
55 Gal.	510 Lbs.	55

D.O.T. Classification: Roof Coating, Not Regulated

HMIS:	Health	1
	Flammability	0
	Reactivity	0
	Protection	X

Storage/Handling & FIRE WARNING: Do not allow product to freeze. USP™ Modified Asphalt Emulsion is for exterior use only. Contains petroleum based products. Keep away from heat, sparks and open flame. Use only with adequate ventilation. Eye and skin irritant. Persons with skin or respiratory sensitivity should not use product without sufficient protection. Avoid contact with skin and breathing vapor. If swallowed, do not induce vomiting. Call physician immediately. Seal container when not in use. Do not use in drinking water or food systems.

Emulsion can be applied within an ambient temperature range of 55°F (12.7°C) to 110°F (43.3°C) with a maximum relative humidity of 50%. Store material at a minimum of 50°F (10°C) or higher for at least 24 hours prior to application if the ambient temperature is 70°F (20°C) or below. **Clean Up:** Keep containers covered when not in use. Clean equipment and overspray with warm water and soap. Follow spray equipment manufacturer's instructions for cleaning with solvents. Clean hands with waterless hand cleaner. **Caution** USP™ Non-Fibered Asphalt Emulsion contains petroleum distillates. See ventilation recommendations regarding solvent odor. **Ventilation** – Cover rooftop air intake vents when applying the primer - to minimize the solvent odor. Use with adequate ventilation and close containers when not in use. If TLV (Total Level of Vapor) is exceeded, respirators are required (NIOSH/MSHA). Inhalation of high vapor concentration may result in headaches and/or dizziness. Remove individual to fresh air and administer oxygen if breathing is difficult. If breathing has stopped, administer artificial respiration, keep victim warm and order emergency medical attention immediately. **Compatibility & Limitations:** Do not use on wet or damp surfaces, directly over wood or on surfaces previously covered with coal tar products.

Application Method: Apply with spray equipment, roller or squeegee to surface to which roofing material will be applied to. Do not apply on damp surfaces. Dries fast. Non-toxic. May be applied to asphalt based roof surfaces. Recommended application rate 3-5 gal per 100 square feet. For best results reinforce emulsion coating with USP™ PolyForcement. Once cured, apply USP™ CERAM-A-MAX Roof Coating or USP™ UltraStar Hi Reflect Roof Coating to protect and extend the life of the roof. Do not install where positive drainage does not exist. U.S. Ply disclaims all liability for flat surface application where poor drainage or ponding of water prevails. **Surface Preparation:** All surfaces to be adhered must be clean, dry and free from any foreign matter, such as oil, grease, dirt or any debris that could inhibit the bonding capabilities of the primer. On existing roofs, inspect roof deck condition – moisture in old roof may require complete removal of existing roof. Check local building codes – local building codes may require complete removal of existing roof. Check with manufacturer for details on cutting out and repairing blisters, buckles and raised edges for a smooth surface. Check all flashings, edges, drains, valleys and vents and repair as needed. **Disposal:** Do not reuse empty container. Dispose of in an environmentally acceptable manner.

All values given are approximate and are subject to change without notice. There is no implied or express warranty given through these values or statements, nor are there any assertions that the product purchased has been individually tested to conform to these standards. Testing is performed on a random basis by "in-house" and independent "third party" evaluation for the purpose of classification and/or approval. Acceptance, purchase and selection of these products are the sole responsibility of the buyer or buyer's representative. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of the product. **NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY U.S. PLY, INC. EXPRESSED OR IMPLIED; STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

USP™ MODIFIED ASPHALT EMULSION

Product Data Sheet

APPLICATION PROCEDURES

USP™ MODIFIED ASPHALT EMULSION

TEMPERATURE

Air and Surface: 50°F Minimum/110°F Maximum

Material: 50°F Minimum/110°F Maximum

BRUSH/ROLLER: Apply with a soft brush or roller in a uniform pattern. Avoid excessive brushing which may cause streaking.

AIRLESS SPRAY-VOLUME:

Output: 2 – 2.5 gal. per min.

Pressure: 1,500 – 2,500 psi

Spray Gun: Graco – Contractor rated for pressure

Fan/Tip: 12/.021 -12/.027 reversible

Extension: 12" – 36" gun extension recommended

APPLICATION INSTRUCTIONS

- **Surface Preparation:** All surfaces to be adhered must be clean, dry and free from any foreign matter, such as oil, grease, dirt or any debris that could inhibit the bonding capabilities of the primer. On existing roofs, inspect roof deck condition – moisture in old roof may require complete removal of existing roof. Check local building codes – local building codes may require complete removal of existing roof. Check with manufacturer for details on cutting out and repairing blisters, buckles and raised edges for a smooth surface. Check all flashings, edges, drains, valleys and vents and repair as needed.
- **Application:** Apply with spray equipment, roller or squeegee to surface to which roofing material will be applied to. Do not apply on damp surfaces. Dries fast. Non-toxic. May be applied to asphalt based roof surfaces. Recommended application rate 3-5 gal per 100 square feet. For best results reinforce emulsion coating with USP™ PolyForcement. Once cured, apply USP™ CERAM-A-MAX Roof Coating or USP™ UltraStar Hi Reflect Roof Coating to protect and extend the life of the roof. Do not install where positive drainage does not exist. U.S. Ply disclaims all liability for flat surface application where poor drainage or ponding of water prevails.
- **Disposal:** Do not reuse empty container. Dispose of in an environmentally acceptable manner.

Airless Application Equipment: This product may be brushed, rolled or sprayed. When using spray equipment, it is important that the following criteria are met: When using a spray pump, a 15:1 fluid to air ratio or greater, capable of delivering 2 gallons or more per minute continuous is needed, as well as a filter screen of 30 mesh or smaller. If a fluid spray hose is used, it should be high pressure with designed working pressure to handle maximum pressure delivered by the spray pump. Inside lining or tube should be of such a material so it is unaffected by the coating and any solvents used for clean up. Additionally, the following criteria should be used for hoses: 3/8" minimum I.D. up to 75 feet; 1/2" minimum I.D. up to 200 feet; and 3/4" minimum I.D. over 200 feet. The larger I.D. sections of hose should be used from the pump out in all circumstances with additional hose size reductions as necessary. Material temperature should be 70°F or higher. In colder temperatures, material may require thermal assistance, such as heated hoses or band heaters to maintain the minimum temperature of 70°F.

If a gun hose whip is used, high pressure with adequate W.P.S.I. 3/8" I.D. X 6 feet with an appropriate lining or tube is recommended. When using a spray gun, we recommend the Graco Hydra Max or equivalent. High-pressure gun swivels are available and can reduce operator fatigue. Any spray tip should be a reversible self-cleaning type with an orifice size of .021 to .027 with a fan angle of 40 to 50 degrees. Always use components rated for pump pressures.

Cleanup Instructions: Clean up with warm water and soap. Spills and splatters can be cleaned immediately with biodegradable citrus cleaner. After cleaning, flush spray equipment with water followed by propylene glycol to prevent unit from rusting.

SAFETY PRECAUTIONS: Do not get on skin or in eyes. Can cause severe burns. Wear protective eye and skin coverings. Avoid breathing fumes and prolonged contact with skin. Do not ingest. Keep containers covered when not in use. When using, provide proper ventilation. Refer to the MSDS sheet before use. For Chemical emergencies, spills, leaks, exposure, or accidents CALL: CHEMTREC DAY/NIGHT 1-800-424-9300.

All values given are approximate and are subject to change without notice. There is no implied or express warranty given through these values or statements, nor are there any assertions that the product purchased has been individually tested to conform to these standards. Testing is performed on a random basis by "in-house" and independent "third party" evaluation for the purpose of classification and/or approval. Acceptance, purchase and selection of these products are the sole responsibility of the buyer or buyer's representative. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of the product. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY U.S. PLY, INC. EXPRESSED OR IMPLIED; STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.