



Technical Data

PolyTar Heavy Duty Pavement Sealer

REV 7/24

DESCRIPTION:

PolyTar is a premium heavy duty, superior performance, polymer-modified refined tar emulsion pavement sealer containing a high molecular weight polymer which has been cross-linked with refined tar (RT-12) to enhance durability, adhesion, elasticity and wear resistance. PolyTar provides a cost effective measure to extend the service life of all asphalt surfaces.

FEATURES:

- Formulated with refined tar (RT-12) chemically cross-linked with selected high molecular weight polymer compounds prior to emulsification, resulting in superior performance not achievable by other processes.
- Protects all asphalt surfaces including commercial and residential parking areas and driveways.
- Resists gasoline and oil penetration
- Manufactured in a continuous colloid mill process for consistent and fine emulsion particle size.
- Exhibits outstanding wear resistance, adhesion and flexibility for long-term durability.
- Protects pavements from oxidation by forming a tough protective skin with a deep black color.
- Weatherproofs and seals porous asphalt surfaces to prevent damaging effects of water penetration.

PHYSICAL PROPERTIES:

Property	Max.	Min.
Water (%)	60	-
Non-Volatile (%)	-	39
Ash (%)	40	30
Solubility in CS ₂ (%)	-	20
Sp. Gr. @ 77°	1.20	1.14
Polymer to RT-12 Ratio (Vol%)	-	6
Tan Delta (G"/G'), 60°C	4.5	-

APPLICABLE SPECIFICATIONS & STANDARDS:

ASTM D-6945; Standard Specification for Emulsified Refined Coal-Tar (Ready to Use, Commercial Grade)

ASTM D-3320; Standard Specification for Emulsified Coal Tar Pitch (Mineral Colloid Type).

ASTM D-490; Standard Specification for Road Tar.

ASTM D-3423; Standard Practice for Application of Emulsified Coal Tar Pitch.

ASTM D-2939; Standard Test Methods for Emulsified Bitumens Used as Protective Coatings

ASTM D-4866; Performance Standard for Coal Tar Pitch Emulsion Pavement Sealer Foundations Containing Mineral Aggregates and Optional Polymeric Admixtures.

AASHTO TP5-97; Provisional Standard Test Method for Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer.

SURFACE PREPARATION:

Pavement surface must be sound, free of debris, vegetation, dust, oils, grease and detergent residues. Accumulations of petroleum deposits, tree sap, and dirt should be scraped clean and treated with GemSeal Tar Prime.

Narrow surface cracks should be filled with GemSeal Pourable Crack Filler, GemSeal Trowelable Crack Filler, GemSeal Crack-Flex Pro/Pro-S, or other suitable hot-applied joint sealant. Wide cracks, severely distressed, alligatored, or deteriorated pavement surfaces should be repaired.

New asphalt paving or repair patches should be allowed to cure a minimum of 60 days at temperatures of 60°F or above before seal coating begins. New asphalt paving or repair patches should not show oil rings when 1 gallon of clean water is poured onto the surface.

MIX DESIGNS & APPLICATION RATES:

Use	Coats	PolyTar ³ (GAL)	Water ² (GAL)	Graded ¹ Aggregate (LB)	Application Rates Gal/Sq.Yd.
Low Traffic	1st	100	0-10	200-300	0.10-0.12
	2nd	100	0-10	0-300 ⁵	0.08-0.12
Medium Traffic	1st	100	0-10	200-300	0.10-0.15
	2nd	100	0-10	0-300 ⁵	0.10-0.12
High Traffic	1st ⁴	100	0-10	200-300	0.10-0.15
	2nd	100	0-10	200-300	0.10-0.12
	3rd	100	0-10	0-300 ⁵	0.08-0.12

1. Mineral Aggregate – Clean, washed, well graded silica or boiler slag mineral aggregate of 40-70 mesh is recommended to provide added traction to the cured coating, in addition to filling hairline voids in the asphalt. Mix designs containing greater than 300 lb. aggregate per 100 gal. GemSeal PolyTar are not recommended.



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2. Additional water need only be added when using aggregate in the final coat mix design.

3. GemSeal PolyTar is produced from a cross-linked polymer modified refined tar (RT-12), and requires NO additional additives except graded aggregate or water. Use of any other additives is strongly discouraged, may damage performance, and will void Limited 1-Year Product Warranty.

4. 1st Coat is applied to entrances, exits, high traffic lanes, and turning radii.

5. Aggregate may be added to the final coat when added skid resistance is desired.

APPLICATION:

GemSeal PolyTar can be applied using spray or mechanical squeegee equipment capable of controlled, uniform distribution of material conforming to mix designs and application rates specified. Material can also be applied with brush or rubber squeegee applicator designed for these products.

GemSeal PolyTar should be applied only when pavement and ambient temperatures are continuously above 50°F for at least 24 hours following application and no rain is forecast for that period. Allow adequate drying time between successive coats. Cooler temperatures (below 70°F) and/or damp or overcast conditions will lengthen curing times.

Note: Sealcoating is not recommended for enclosed or permanently shaded parking areas such as underground parking garages.

PACKAGING:

Available in 55-gallon drums and tank truck up to 4,500 gallons.

ATTENTION:

GemSeal PolyTar should be protected from freezing.

CAUTION:

Both surface and ambient temperature shall be a minimum of 50°F and rising during application. Do not apply if temperature is expected to drop below 50°F, or if rain is expected in the forecast within a 24

hour period.

MANUFACTURING & CUSTOMER SERVICE:

Visit gemsealproducts.com or phone 866-264-8273 to find the location near you.

LIMITED WARRANTY

The statements made on this technical data sheet are believed to be true and accurate and are intended to provide a guide for approved application practices. As workmanship, weather, construction, condition of pavement, tools utilized, and other variables affecting results are all beyond our control, the manufacturer warrants only that the material conforms to product specifications and any liability to the buyer or user of this product is limited to the replacement value of the product only. The manufacturer expressly disclaims any implied warranties of merchantability or fitness for a particular purpose.