



Technical Data

FedSpec Pavement Sealer Concentrate

REV 7/24

DESCRIPTION:

GemSeal FedSpec Concentrate is a premium refined tar emulsion pavement sealer, designed for application to asphalt pavement surfaces. GemSeal FedSpec extends the service life and enhances the appearance to provide a cost effective preventive maintenance coating.

FEATURES:

- Formulated specifically to protect all asphalt surfaces including commercial and residential parking areas and driveways
- Exhibits outstanding wear resistance
- Weatherproofs and seals porous asphalt surfaces, preventing damaging effects of water penetration
- Protects pavements from oxidation by forming a tough protective skin with a deep black color
- Manufactured in a regulated continuous process for consistent emulsion particle size and distribution
- Resists gasoline and oil penetration
- Colloid milled for superior wearability and consistency

PHYSICAL PROPERTIES:

Property	Max.	Min.
Water (%)	53	-
Non-Volatile (%)	-	47
Ash (%)	40	30
Solubility in CS ₂ (%)	-	20
Sp. Gr. @ 77°	1.29	1.20

APPLICABLE SPECIFICATIONS & STANDARDS:

Meets or Exceeds requirements for:

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

ASTM D 5727; Emulsified Refined Tar (Mineral Colloid Type) {replaces Federal Specification R-P-355e}

ASTM D 6945; Emulsified Refined Tar (Commercial Grade), Type I and Type II

ASTM D 3320; Emulsified Refined Tar Pitch (Mineral Colloid Type)

FAA Engineering Brief No. 46; Item P-625 and No. 46A, Item P-630

Item P-627 (with additive) , Item P-631 (with additive)

MIX DESIGNS:

GemSeal FedSpec is a concentrate designed to be thoroughly blended with potable water, mineral aggregate and additives in proportions according to the mix designs described in the table below.

FedSpec (GAL)	Water (GAL)	Graded Aggregate ¹ (LB)	Latex Polymer ² (GAL)
100	30-35	200-300 ⁴	1-2
100	30-40	200-300 ⁴	2-3
100	35-45 ³	200-300 ⁴	3-5

*Note: sub-tropical regions may require 10% more water

- 1. Mineral Aggregate** - Introduction of clean, washed, well graded, medium to fine silica or boiler slag mineral aggregate is recommended to provide added traction to the cured coating, in addition to filling hairline voids in the asphalt. 40-70 mesh aggregate size is recommended.
- 2. Latex Polymer** - Field proven in mix designs for best performance with GemSeal FedSpec should include the use of GemSeal Ultra 3 Latex, GemSeal Rapid Set or GemSeal AQS 3.
- 3. Mix designs** containing in excess of 50 gal. water per 100 gal. FedSpec are not recommended, as curing and wear can be affected.
- 4. Mix designs** containing more than 500 lb. aggregate or more than 5 gal. latex per 100 gal. GemSeal FedSpec is not recommended.
- 5. USE ONLY GEMSEAL** polymer fortifiers specifically designed for FedSpec. DO NOT USE other additives. Other additives are not chemically compatible with GemSeal FedSpec and will degrade the emulsion.

APPLICATION RATE:

0.10-0.15 Gal/Sq.Yd. (per coat)

Use	Application Rate Gal/Sq.Yd.	Coats
Low Traffic	0.10-0.15	2
Medium Traffic	0.12-0.15	2
High Traffic	0.12-0.15	3

Fueling or truck maintenance areas may require an additional lightly sanded coat.

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, or a 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.



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New Asphalt paving or repair patches should not show oil rings when 1 gallon of clean water is poured onto the surface.

APPLICATION:

GemSeal FedSpec 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 FedSpec 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.

Notes: 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.

SERVICE:

Timely service is available within 300 mile radius of our manufacturing facilities.

ATTENTION:

GemSeal FedSpec 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.