

# USP 7415

**Performance Grade**

**PG70-22XR**

**Application/TxDOT Mix Design Item**

**340,341,342,344,346,347**

This Product is a combination of Tire Rubber (TR) at 10%, fully incorporated into asphalt and Styrene Ethylene Copolymer (SEC). PG70-22XR has Great Compatibility, High Durability, Skid Resistance, Low Temperature Crack Resistance and is Very Stable.

## Standard Properties

### PROPERTIES

### SPECIFICATION

#### Original

Rotational Viscosity, Pas #27 Spindle @ 135°C	< 3.0 Pas (AASHTO 316)
G* / Sinδ, @ 70°C 10 rad/sec, kPa	> 1.00 kPa (AASHTO 315)
Tire Rubber Content, % (solids basis)	> 10.0
Solubility w/ min. 10% TR, %	> 99.0 (AASHTO T44)
Flash Point, COC, °C (°F)	> 230 (446) (AASHTO T48)

#### RTFO, AASHTO T240

G* / Sinδ @ 70°C 10 rad/sec, kPa	> 2.200 kPa (AASHTO 315)
MSCR @ 3.2 KPa <sup>-1</sup> , 67°C	(AASHTO T350)
Non-Recoverable, J <sub>nr</sub>	≤ 1.7
J <sub>nr</sub> diff (%)	Report
Creep Recovery, %	> 30.00

#### PAV, AASHTO R28

G*Sinδ @ 25°C 10 rad/sec, kPa	< 5000 kPa (AASHTO 315)
Creep stiffness, TP1 S, -12°C @ 60 sec	< 300 Mpa (AASHTO 313)
M - Value, -12°C @ 60 sec	> 0.300 (AASHTO 313)

#### TxDOT Mix Design Item

<u>340 &amp; 341</u> Dense-Graded Asphalt (DGA)
<u>342</u> Permeable Friction Course (PFC)
<u>344</u> Superpave
<u>346</u> Stone Matrix Asphalt (SMA)
<u>347</u> Thin Overlay Mixtures (TOM)

<u>Compaction Temp.</u>	<u>Mixing Temp.</u>
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275 – 285	315 - 325
(±10, Depend on Project Condition)	

With USP Binders, RAP addition from 0-18% is possible resulting in successful overlays with excellent rutting resistance. Since all asphalts and recycled pavements can be different, no guarantees are made, however improved results are expected.