



PG MOD

BINDER MODIFIER

Improves low temperature and cracking properties of asphalt binder.

PG Mod is a green chemistry that was developed to provide an alternative option for binder modification. PG Mod can be used to reduce the low temperature of the asphalt binder. At the same time, PG Mod can improve critical temperature deviations of the asphalt binder.

How is PG Mod incorporated?

Typically, PG Mod is pre-blended with asphalt cement to facilitate testing/certification of the material before use. In addition, it can be introduced on demand at the production facility via in-line blending.

What is the addition rate?

Dosage rates depend on the desired modification of the base asphalt cement. If used to “sweeten” the asphalt cement, then dosage rates range between 0.5% and 1.0% by weight of asphalt cement. If used to modify a full Performance Grade or more, dosage rates are typically in the 3% by weight of asphalt cement range.

What is the shelf life?

PG Mod forms a homogeneous, stable mixture when blended with asphalt.

NOTABLE BENEFITS

- Non-corrosive to pumps, pipelines and storage tanks
- Environmentally friendly (non-toxic), odor-free & safe for workers
- Can be transported without any special placarding or licensing

IMPORTANT PROPERTIES

- Physical Form: slightly viscous, free-flowing liquid
- Odor: neutral to mild
- Density: 7.63 lbs./gallon at 77° F

See Proof that Verifies PG Mod Performance Advantages

Our products undergo rigorous field testing before they go to market. It's chemistry that matters in the mix.

Delta Tc Comparison

	Asphalt	PG	Stiffness T _c	m-value T _c	ΔT _c
	NJ PG 64-22	67.5-26.2	-26.2	-27.0	0.8
	NJ PG 64-22 w/3% PG Mod	62.5-29.8	-29.8	-29.8	0.0
	FL PG 67-22	68.4-25.5	-29.5	-25.5	-4.0
	FL PG 76-22 w/4% PG Mod	59.9-33.1	-34.4	-33.1	-1.3
	AR PG 64-22	65.2-22.7	-31.9	-22.7	-9.2
	AR PG 64-22 w/4.4% PG Mod	57.7-28.8	-34.1	-28.8	-5.3
	LA PG 67-22	68.6-22.5	-25.4	-22.5	-2.9
	LA PG 67-22 w/2% PG Mod	65.9-27.9	-27.6	-27.9	0.3
	LA PG 67-22 w/4% PG Mod	62.6-30.2	-30.7	-30.2	-0.5
	MS PG 76-22	77.5-24.0	-24.3	-24.0	-0.3
	MS PG 76-22 w/2% PG Mod	72.3-27.3	-27.4	-27.3	-0.1

20-HR AGE VS. 40-HR AGE PAV COMPARISON

Product	M-VALUE DATA			S DATA			LOW TEMP PG	
	20-HR (M-value)	40-HR (M-value)	Low Temp Δ	20-HR (Stiff)	40-HR (Stiff)	Low Temp Δ	20-HR M-value Improvement	40-HR M-value Improvement
Base 67-22	68.6-22.5	68.6-17.0	5.5	68.6-25.4	68.6-23.8	1.6		
2% PG Mod w/Base 67-22	64.8-26.3	64.8-23.0	3.3	64.8-27.7	64.8-27.7	0.0	3.8	6.0
4% PG Mod w/Base 67-22	60.9-28.6	60.9-26.6	2.0	60.9-30.4	60.9-30.4	0.0	6.1	9.6

Manchester Pavement Solutions creates chemical additives to overcome challenging asphalt construction problems. Designed by contractors for contractors, every product is field-tested, conditions-based, and results-driven.