



## Hoosier F45 Humidity Test

A popular question I often get is “Does HMS affect the moisture in the tires?”. It’s a valid question.

We decided to test the **Hoosier F45** tire on an abrasive racetrack. We ran near equal short hot laps on two different cars. One car (a) was on soaks and the other (b) was completely dry. None of the 8 tires had been treated previously. All 8 tires had multiple heat cycles on them prior to the test. We treated the tires on the (a) car following our internal instructions utilizing 14 oz. per tire. All 8 tires had an air/nitrogen mixture & air pressures were equal tire to tire on both cars.

Ambient air temperature was at 94.7` with 52% humidity.

### A. Car (Soaked per instructions)

Prior to first run inside humidity		Immediately after first run inside humidity	
LF 24.6%	RF 22.8%	LF 27.3%	RF 27.8%
		+2.7%	+5.0%
LR 29.5%	RR 21.8%	LR 32.0%	RR 24.8%
		+2.5%	+3.0%

On average the tires gained 3.3% humidity per tire. Inside tire temperatures gained 11-13 degrees. (The car ran 2 pace laps and 8 hot laps).

### B. Car (Virgin dry tires)

Prior to first run inside humidity		Immediately after first run inside humidity	
LF 29.5%	RF 24.8%	LF 32.3%	RF 28.7%
		+2.8%	+3.9%
LR 26.0%	RR 24.9%	LR 28.1%	RR 26.8%
		+2.1%	+1.9%

On average the tires gained 2.7% humidity per tire. Inside tire temperatures gained 8-10 degrees. (The car ran 3 pace laps and 6 hot laps).

As you can see HMS had little affect on the humidity levels inside the tires. On average the treated tires gained just **0.6%** humidity over the dry tires. This gain is minimal and came on the car that ran two additional hot laps. Between the additional hot laps and the air/nitrogen mixture in both sets, we don’t believe HMS has any measurable negative affect on humidity/moisture levels inside the tires.

Special thanks to [www.wesburtonperformance.com](http://www.wesburtonperformance.com) for the track time.  
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