

## 1. What tire sizes does Hoosier offer for Sprint and Enduro kart applications?

### 5" Bead Size Kart Tires

| Tire Size  | Tread Width | Approx. Dia | Approx. Circ | Recom. Rim | Measured Rim | Section Width | Compounds (Soft → Firm)   | Application |
|------------|-------------|-------------|--------------|------------|--------------|---------------|---------------------------|-------------|
| 4.5/10.0-5 | 4.25"       | 10.0"       | 32.0"        | 5-5.5"     | 5.0"         | 5.5"          | R55, R60A, R60B, R70, R80 | Front       |
| 6.0/11.0-5 | 5.50"       | 11.0"       | 34.0"        | 7-7.25"    | 7.0"         | 7.25"         | R60A, R60B, R70, R80      | Rear        |
| 7.1/11.0-5 | 6.375"      | 11.0"       | 34.0"        | 8-8.25"    | 8.25"        | 8.5"          | R55, R60A, R60B, R70, R80 | Rear        |
| 4.5/10.0-5 | 4.25"       | 10.0"       | 32.25"       | 4.75"      | 4.75"        | 5.25"         | Wet                       | Rain Front  |
| 6.0/11.0-5 | 5.50"       | 11.0"       | 34.5"        | 6.75"      | 6.75"        | 7.25"         | Wet                       | Rain Rear   |

### 6" Bead Size Kart Tires

| Tire Size  | Tread Width | Approx. Dia | Approx. Circ | Recom. Rim | Measured Rim | Section Width | Compounds (Soft → Firm) | Application                                      |
|------------|-------------|-------------|--------------|------------|--------------|---------------|-------------------------|--|
| 4.6/10.5-6 | 4.375"      | 10.5"       | 33.0"        | 5-6"       | 5.0"         | 5.5"          | R60B, R60               | Enduro Front & Rear                              |
| 5.0/10.5-6 | 4.50"       | 10.5"       | 33.75"       | 5-6"       | 5.0"         | 5.75"         | R60B (CIK)              | Superkart Front                                  |
| 5.5/11.0-6 | 4.75"       | 11.0"       | 34.75"       | 5-6"       | 5.5"         | 6.75"         | R60B                    | Superkart Front (Tall) / Enduro Rear             |
| 8.0/11.5-6 | 7.00"       | 11.5"       | 35.875"      | 8-9"       | 8.0"         | 8.25"         | R60B (CIK)              | Superkart Rear (Tall)                            |
| 5.0/10.5-6 | 4.50"       | 10.5"       | 33.75"       | 5.0"       | 5.0"         | 5.75"         | Wet (CIK)               | Superkart Rain Front<br>Enduro Rain Front & Rear |
| 7.1/11.5-6 | 6.75"       | 11.5"       | 35.875"      | 8.0"       | 8.0"         | 8.25"         | Wet (CIK)               | Superkart Rain Rear                              |

## 2. How do Hoosier kart compounds compare to other manufacturers?

Kart Tire Cross Reference Chart

| Hoosier Compound/<br>Durometer | Bridgestone | MG          | Evinco | Vega         | LeCont |
|--------------------------------|-------------|-------------|--------|--------------|--------|
| R55 (55-57)                    | YLM/YNB     | FZ - Yellow | Red    | XM White     |        |
| R60A (55-57)                   |             |             |        |              | LO     |
| R60B (60-62)                   | YLC         | IZ - White  |        | XH2 Green    | LP     |
| R60-6" (62-64)                 | YLH         |             |        | XHE Green 6" |        |
| R70 (66-68)                    |             | HZi - Red   | Blue   | VAH Red      |        |
| R80 (70-72)                    | YDS         | IR - Blue   |        |              |        |
| WET (43-45)                    | YLP/YNP     |             |        | W5 Rain      |        |

### COMPOUND APPLICATION

#### DRY Compounds

The R55 is our most advanced open competition tire for sprint, solo, and road race applications. Based on the R60A platform, this medium-soft compound has a stiffer sidewall construction and is specially formulated to meet the increasing demands of 125cc shifter (gearbox) classes. The R55 comes up to temperature quicker and provides excellent lateral grip for a faster, crisper transition while negotiating corners. The R55 can also be used by heavier, non-gearbox classes that require a tire with more lateral support and grip.

The R60A is a medium compound and is the most diverse tire in our lineup. The compound's unique composition offers high levels of traction, without compromising consistency and durability. The R60A is quickly becoming the benchmark in open competition racing and is ideal for all kart classes (both 4-cycle & 2-cycle) that require an exceptional level of grip, unparalleled consistency, and driver confidence.

The R60B is a medium-hard compound that is designed with an emphasis on melding performance with longevity and consistency. The R60B offers drivers a more durable performance tire with less degradation on a multitude of track conditions. This compound is ideal as a club spec tire.

The R60 -6" tire is a hard compound that is designed with moderate mechanical grip to provide less rolling resistance on high heat, high grip track conditions. The R60 is ideal for 4-cycle & 2-cycle enduro classes that require less traction during the summer months or need a more heat resistant and durable tread compound.

The R70 is an economy sprint tire designed with the budget racer in mind. This distinctive compound exudes superior wear characteristics without sacrificing the performance aspect inherent to racing. It is ideal for clubs or series seeking a low cost tire that is designed specifically to curb racing expenses and promote driver parity.

The R80 utilizes the same design criteria as the R70, but with a greater emphasis on durability and reduced traction. The R80 compound is harder by 2-4 points, and is fitted to a stiffer tire construction that minimizes rolling resistance and further enables lower powered karts to remain free on the racing surface. The R80 is the spec tire for the Margay IGNITE series beginning in 2019.

WET Compounds

The Hoosier 5” bead size WET compound is designed with a substantial amount of wet traction for effortless maneuverability in full wet conditions. The compound is also equipped with higher levels of durability to maintain consistent performance in damp or drying track conditions.

The Hoosier 6” bead size WET-CIK uses similar technology as the 5” bead size WET, but it is fitted with a slightly harder, more durable compound for Superkart applications.

**3. What air pressure is recommended for Hoosier Sprint, Enduro, and Super Kart Tires?**

Below is a table with the recommended starting pressures for 5” bead size kart tires

| <b>Compound</b>    | <b>2-Cycle Sprint</b> | <b>4-Cycle Sprint</b> | <b>Solo</b>    |
|--------------------|-----------------------|-----------------------|----------------|
| R55 (Medium-Soft)  | 10-11 psi cold        | 11-13 psi cold        | 12-14 psi cold |
| R60A (Medium)      | 11-12 psi cold        | 12-14 psi cold        | -              |
| R60B (Medium-Hard) | 12-14 psi cold        | 14-16 psi cold        | -              |
| R70 (Hard)         | 14-18 psi cold        | 14-18 psi cold        | -              |
| R80 (Super Hard)   | 14-18 psi cold        | 14-18 psi cold        | -              |
| Wet                | 14-16 psi cold        | 14-16 psi cold        | 15-17 psi cold |

Below is a table with the recommended starting pressures for 6” bead size Enduro & Superkart tires.

| <b>Compound</b>    | <b>2-Cycle Enduro</b> | <b>4-Cycle Enduro</b> | <b>Superkart</b>              |
|--------------------|-----------------------|-----------------------|-------------------------------|
| R60B (Medium-Hard) | 10-12 psi cold        | 10-14 psi cold        | 11-14 psi cold (0.75-1.0 Bar) |
| R60 (Hard)         | 10-14 psi cold        | 10-16 psi cold        | -                             |
| Wet                | 14-16 psi cold        | 14-16 psi cold        | 14-17 psi cold (1.0-1.2 Bar)  |

In general, operating at the low end of the recommended pressure range will cause the tire to come up to temp slower and provide more consistent grip over long green lap sessions. It’s more common to use the lower starting pressure in classes that induce more heat into the tires, in conditions with higher track temperatures, or in higher grip track conditions (i.e. track takes rubber).

Conversely, operating at the higher end of the recommended pressure range will cause the tire to come up to temp quicker and potentially cause the compound to become “greasy” in conditions with higher track temperatures. Cooler track/ambient temperatures or dirty, “green” tracks tend to favor a higher cold starting pressure.

#### **4. What is the proper method for mounting a Hoosier Kart Tire?**

DIRECTION OF ROTATION/ MOUNTING INSTRUCTIONS: Every Hoosier race tire has a four character alphanumeric code embossed into ONE sidewall of the tire (example: F7X2). To be consistent when mounting from set to set, the tire should be placed on the rim so that the serial code faces towards the left side of the vehicle. This applies to tires without directional arrows.

On tires with directional arrows, please mount the tire onto the rim so that the tire travels in the direction of the rotational arrow. Once the tire is on the rim, we recommend placing the tire inside a mounting ring and adjusting the ring to fit snug around the tire. We highly advise using the mounting ring as we believe not using it can over stretch the carcass leading to inconsistent sizing. Never exceed 40 psi to seat beads. Once the tire has seated onto the rim, it is important the tire be initially stretched to about 10 psi over cold starting pressure to get the tire to its proper "profile". The tire should be set at this pressure for a few minutes and then dropped to the desired race pressure. The max inflation pressure is 57 psi (4.0 kg/cm<sup>2</sup>). Never exceed the max inflation pressure under any circumstance.