

# Brunswick® **Copperhead - Reactive**

## Part Number

60-104912-93X

## Coverstock

PowrKoil 18™- Reactive

Color:

Copper / Blue / Ivory - All Solid

Hardness: 76-78

Glow Engraving

## Factory Finish

800-Grit Wet Sand

## Core Dynamics @ 16#

RG Max: 2.539

RG Min: 2.496

RG Diff.: 0.043

Average RG: 3.5

## Performance

Hook Potential: 130

Length: 80

Typical Breakpoint Shape: 60

Chart Position:P-17

## Available Weights

10-16 Pounds



**Hook Potential:** Low (10)  High (175)

**Length:** Early (25)  Long (235)

**Breakpoint Shape:** Smooth Arc (10)  Angular (100)

**Flare Potential:** Low (0.0)  High (0.080)

**RG-average:** Center Heavy (1)  Cover Heavy (10)

The **Copperhead** targets one of the most popular reactions in the bowling ball industry, Reactive Solid Sanded. This type of ball reaction is embraced by many bowlers as the best all-around combination of coverstock and surface finish. Providing high hook potential with a controllable ball reactions and good pin carry.

## Technology

**Aggressive Reactive Coverstock:** PowrKoil 18 coverstock is a proven performer that has probably been on more bowling balls than any other Reactive coverstock in the bowling industry. PowrKoil 18 has been used on some of Brunswick's most successful balls including the Danger Zone, Red Alert and BVP Nemesis. Aggressive in the oil and strong off the dry, PowrKoil 18 is a perennial favorite among all styles of bowlers.

**Low RG Rocket Core:** The Copperhead uses Brunswick's Multi-Sided Rocket Core System which provides a low RG to help the ball rev-up sooner and create tremendous mid-lane recovery.

**800-Grit Wet Sand Finish:** The Copperhead is finished with an 800-grit wet sand finish which will allow most bowlers to match-up to both freshly oiled and moderately broken down house conditions. Plenty of traction on all but the oiliest lanes combined with a strong backend reaction. The low Rg, combined with the 800 grit finish, helps the Copperhead bite the lane quicker and send poison to the pins

## Reaction Characteristics

•**Out of the Box:** With its 800-grit wet sand surface, the Copperhead matches up well on most medium to oily house conditions.

•**When dulled:** The Copperhead's hooking action will increase and its arc will become more even, creating a better match-up for oily lane conditions and for smoothing over/under reactions seen on wet/dry lane conditions.

•**When shined:** With either **Brunswick's Factory Finish "High Gloss Polish" or "Rough Buff"**, your Copperhead will go longer in the oil and react stronger to the dry creating a more skid/snap arc. High Gloss Polish creates more length than Rough Buff.

## Reaction Setup

The Copperhead can be drilled using the standard drilling techniques developed for two-piece balls, see the included drilling instructions for reaction characteristics and layout details. The Copperhead is finished with a dull 800-grit surface which increases its hooking action in the oil. Dull surface finishes can sometimes hook too early resulting in reduced backend reaction and hitting power. To increase length, polish the surface with Brunswick's **Factory Finish Rough Buff**. To increase length and create and even more skid/snap reaction use Brunswick's **Factory Finish High Gloss Polish**.

## Maintaining Your Ball Reaction

Brunswick recommends the following procedures to maintain and restore your Brunswick ball's reaction characteristics:

- Clean your Brunswick ball with **Brunswick Remove All** or similar ball cleaner after every use to reduce oil absorption.
- If you think your Brunswick ball has lost some of its "Out of the Box" reaction, restore the ball to its original factory finish listed on the product information sheet. This is especially important for balls that are highly sanded or polished. Sand to 400-grit then use **Brunswick's Factory Finish High Gloss Polish** to restore the original factory finish on high gloss polish balls. Sand to 220-grit then use **Brunswick's Factory Finish Rough Buff** to restore the original factory finish on rough buff balls. For dull balls, wet sand with the sandpaper listed on the product information sheet.
- If there is a visible track on your ball have your Pro shop use a Haas or similar resurfacing machine to remove the track then restore the ball to its original factory finish. This service is available, for a fee, at many Pro Shops.
- If after restoring the original factory finish you feel your Brunswick ball has still lost some of its hooking action, remove the oil from the ball by gently warming it with either the **Revivor** or **Rejuvenator** Pro Shop devices that have been designed for this purpose. This service is available, for a fee, at many Pro Shops. Brunswick's testing has shown that by combining the restoration of the factory finish, resurfacing of the track and oil removal your Brunswick ball can maintain its original "Out of the Box" reaction for hundreds of games.
- Absorbent materials sold by other bowling ball manufactures to remove oil can also be used on Brunswick bowling balls. Information to date seems to indicate that absorbent materials have a more limited ability to remove oil than warming. You may be disappointed with results on heavily oil soaked balls.






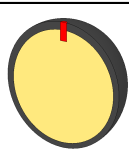
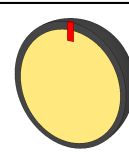
**Note:** Oil soaked balls tend to traction less in the oil and respond less to the dry boards on the lane. If you are matching-up using an oil soaked ball on wet/dry or broken down lane conditions, removing the oil from the ball will significantly change your match-up and possibly create undesirable over reactions.

## Ball Comparisons

Want to compare the performance of this ball to other Brunswick balls? Go to our website at [www.brunswickbowling.com](http://www.brunswickbowling.com). Click on **Balls**, then click on **Pro Shop Information**. This page contains a link to the **Brunswick Ball Comparison Chart**. This chart allows you to see, at a glance, the performance of all Brunswick balls relative to each other, defined by their **Hook Potential** and **Arc Characteristics**. There's even an essay to help explain and guide you through the chart.

## Lightweight Engineering

At Brunswick, the unique core shape of each individual ball is used for weights from 14 to 16 pounds. This approach to lightweight ball engineering provides bowlers with consistent ball reaction characteristics across this weight range. At 12 & 13 pounds, Brunswick uses a generic core shape with a RG-differential of 0.040. This differential is close enough to the 14-16 pound shape so that the same drilling instructions can be used.

Weight	16#	15#	14#	13#	12#	11#	10#
Core Shape							
RG-max.	2.539	2.552	2.567	2.625	2.648	2.771	2.802
RG-min.	2.496	2.508	2.524	2.585	2.608	2.769	2.800
RG-diff.	0.043	0.044	0.043	0.040	0.040	0.002	0.002

For the most up to date Product Line Information go to [www.brunswickbowling.com](http://www.brunswickbowling.com)