



## Systemic / Effective Fire Blight Control

Disease	Rate Per Acre	Treatment Timing
Fire Blight Apple Scab Anthracnose Shoot blast	20 – 40 oz	Foliar Delayed Dormant through bloom In Season Root Drench Applications Foliar Post-Harvest

**Overview:** Instill is a low dose **systemic** copper which provides a high level of activity towards pome fruit diseases. The patented formulation allows the copper to be fully absorbed by the plant within 3 hours of application. The systemic technology makes Instill significantly different than other low dose copper as it will move throughout the plant, allowing providing protection on the outside of the plant as well on the inside.

**Supporting Research:** Instill has been in Oregon and Washington fire blight trials for the past 5 years, and consistently demonstrated control equal to Previsto and superior to Cueva coppers. Crop safety also was equal to the competing low dose coppers.

### Instill Advantages:

**Low dose use rate:** in fire blight trials 30 ounces / 100 of Instill provided the same level of disease control as 3-4 quarts of competing low dose coppers.

**Systemic Uptake:** Because Instill is absorbed into the plant tissue within 3 hours there is less chance of phytotoxicity and reduced concern over copper residual interacting with future pesticide applications

### Application Timing and Strategy

**Delayed Dormant:** Apply 30 – 40 oz / 100

**Tight Cluster:** Apply 20 - 30 oz / 100

**Early Bloom:** Apply 20 -30 oz / 100 **\*\*during period of fire blight susceptibility apply 5 day interval**

### Bloom and Growing Season:

Use higher rates for more susceptible varieties. If injury is observed, discontinue use immediately. Minimum retreatment interval = 5 days for bloom, growing season

### Growing Drench Applications

Instill can be applied as a root drench post bloom to avoid fruit finish concerns while providing systemic disease protection including fire blight suppression.

### Spray Solution pH

Buffering water pH is critical for crop safety and performance. Idea pH for spray solution is a **pH of 5.5 – 6.5**.

Solution pH below 4.5 can cause uptake to be too rapid, pH above 7 reduces the systemic uptake.

Spray volume should not exceed 100 GPA.

**Surfactant Use:** The addition spray oil in dormant may enhance coverage of the wood in dormant.

**Tank Mixing:** Do not tank mix with other pesticides, foliar nutrients, adjuvants, spreaders, buffering agents or stickers

**Regulatory:** 0 day PHI, 48 hour REI, Exempt from food tolerance,

