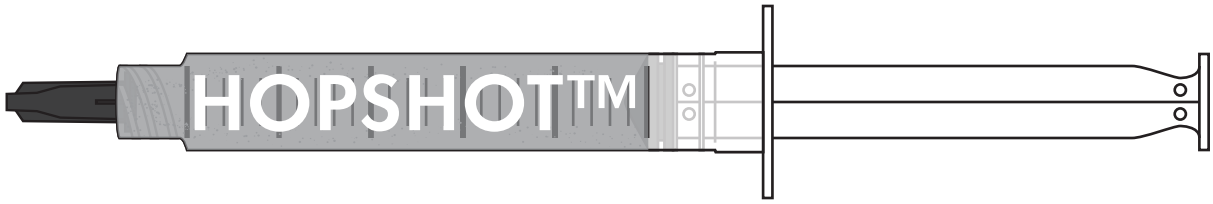
HOPSHOT™



INSTRUCTIONS:

Treat the HopShot™ as you would hops. One milliliter (1ml) of HopShot™ correlates to approximately 10IBUs in 5 gallons of 1.050 wort boiled for 60min. As wort increases in gravity, the isomerization decreases and length of boil increases hop utilization.

***Note - The HopShot™ may be used for both flavor and aroma additions of hops and should be treated as regular hops.

HOW TO CALCULATE:

ASSUME:

- +1.080 decreases hop utilization by ~10%
- +1.100 decreases hop utilization by ~20%
- +1.150 decreases hop utilization by ~30%
- 90 min boil increases IBU by 10% (decreases HopShot need by 10%)

Gravity	10 IBU	20 IBU	30 IBU	40 IBU	50 IBU	60 IBU	70 IBU	80 IBU	90 IBU	100 IBU
1.030	1	2	3	4	5	6	7	8	9	10
1.040	1	2	3	4	5	6	7	8	9	10
1.050	1	2	3	4	5	6	7	8	9	10
1.060	1	2	3	4	5	6	7	8	9	10
1.070	1	2	3	4	5	6	7	8	9	10
1.080	1.1	2.2	3.3	4.4	5.5	6.6	7.7	8.8	9.9	11
1.090	1.1	2.2	3.3	4.4	5.5	6.6	7.7	8.8	9.9	11
1.100	1.1	2.2	3.3	4.4	5.5	6.6	7.7	8.8	9.9	11
1.110	1.2	2.4	3.6	4.8	6	7.2	8.4	9.6	11	12
1.120	1.2	2.4	3.6	4.8	6	7.2	8.4	9.6	11	12
1.130	1.2	2.4	3.6	4.8	6	7.2	8.4	9.6	11	12
1.140	1.2	2.4	3.6	4.8	6	7.2	8.4	9.6	11	12
1.150	1.2	2.4	3.6	4.8	6	7.2	8.4	9.6	11	12
1.175	1.3	2.6	3.9	5.2	6.5	7.8	9.1	10	12	13
1.200	1.3	2.6	3.9	5.2	6.5	7.8	9.1	10	12	13

Volume of HopShot™ (ml)

EXAMPLE 1:

35 IBUs are needed for 60min boiling addition for FIVE (5) gallons of beer at 1.045.

35IBU/ 10IBU/ml = 3.5ml needed of HopShot™

EXAMPLE 2:

80 IBUs are needed for 60 min boiling addition for TEN (10) gallons of beer at 1.085.

80IBU/ 10IBU/ ml = 8ml x 2 (for 10 gal) = 16ml + 10% = 17.6ml needed of HopShot™

EXAMPLE 3:

60 IBU are needed for a 90 min boiling addition for FIVE (5)gallons of beer at 1.150.

60IBU/ 10IBU/ml = 6ml + 30% (+1.150) - 10% (90min boil) = 7.2ml need of HopShot™