

Tropi-Kolsch-Homebrew

Type: All Grain
Batch Size: 5.0 gal
Boil Size: 5.7 gal
Boil Time: 60 min
End of Boil Vol: 5.5 gal
Final Bottling Vol: 4.8 gal
Fermentation: Kolsch
Taste Notes:



Prepare for Brewing

Total Water Needed: 7.0 gal

Water Prep

| Amt | Name | Type | # | %/IBU | Volume |
|---------|---------------------------------|-------------|---|-------|--------|
| 7.0 gal | Distilled Water | Water | 1 | - | - |
| 3.23 ml | Lactic Acid (Mash) | Water Agent | 2 | - | - |
| 1.60 g | Calcium Chloride (Mash) | Water Agent | 3 | - | - |
| 1.39 g | Epsom Salt (MgSO4) (Mash) | Water Agent | 4 | - | - |
| 0.52 g | Gypsum (Calcium Sulfate) (Mash) | Water Agent | 5 | - | - |
| 0.10 g | Salt (Mash) | Water Agent | 6 | - | - |

Mash or Steep Grains

Mash Ingredients

| Amt | Name | Type | # | %/IBU | Volume |
|---------------|----------------------------------|-------|----|--------|---------|
| 4 lbs | Millet, Pale, Grouse (2.0 SRM) | Grain | 7 | 47.1 % | 0.3 gal |
| 3 lbs 12.0 oz | Millet, Munich, Grouse (3.0 SRM) | Grain | 8 | 44.1 % | 0.3 gal |
| 12.0 oz | Millet, Cara, Grouse (2.0 SRM) | Grain | 9 | 8.8 % | 0.1 gal |
| 10.00 ml | Ondea Pro (Mash 130.0 mins) | Other | 10 | - | - |
| 8.00 ml | Ceremix Flex (Mash 130.0 mins) | Other | 11 | - | - |
| 5.00 ml | Termamyl SC (Mash 130.0 mins) | Other | 12 | - | - |

Mash Steps

| Name | Description | Step Temperature | Step Time |
|-----------|----------------------------------|------------------|-----------|
| Mash Step | Add 2.6 gal of water at 138.91 F | 125.00 F | 15 min |
| Mash Step | Heat to 145.00 F over 20 min | 145.00 F | 45 min |
| Mash Step | Heat to 175.00 F over 20 min | 175.00 F | 30 min |

- Fly sparge with 4.4 gal water at 168.00 F
- Add water to achieve boil volume of 5.7 gal
- Estimated pre-boil gravity is 1.042 SG

Notes

Boil Ingredients

| Amt | Name | Type | # | %/IBU | Volume |
|------------|--|-------------|----|-----------|--------|
| 0.75 oz | Hallertauer Mittelfrueh [4.00 %] - Boil 60.0 min | Hop | 13 | 11.8 IBUs | - |
| 2.25 g | Calcium Chloride (Boil) | Water Agent | 14 | - | - |
| 1.94 g | Epsom Salt (MgSO4) (Boil) | Water Agent | 15 | - | - |
| 0.74 g | Gypsum (Calcium Sulfate) (Boil) | Water Agent | 16 | - | - |
| 0.14 g | Salt (Boil) | Water Agent | 17 | - | - |
| 1.00 Items | Whirlfloc Tablet (Boil 15.0 mins) | Fining | 18 | - | - |
| 1.61 g | Yeastex 61 (Boil 10.0 mins) | Other | 19 | - | - |
| 0.50 oz | Chamomile (Boil 10.0 mins) | Spice | 20 | - | - |
| 0.75 oz | Hallertau Blanc [10.50 %] - Boil 5.0 min | Hop | 21 | 12.6 IBUs | - |

Estimated Post Boil Vol: 5.5 gal and Est Post Boil Gravity: 1.046 SG

Cool and Transfer Wort

- Cool wort to fermentation temperature
- Transfer wort to fermenter
- Add water if needed to achieve final volume of 5.0 gal

Pitch Yeast and Measure Gravity and Volume

Fermentation Ingredients

| Amt | Name | Type | # | %/IBU | Volume |
|---------|---|-------|----|-------|--------|
| 1.0 pkg | SafAle German Ale (DCL/Fermentis #K-97) [23.7 ml] | Yeast | 22 | - | - |

- Measure Actual Original Gravity _____ (Target: 1.046 SG)
- Measure Actual Batch Volume _____ (Target: 5.0 gal)

Fermentation

- Primary temp: 62.00 F Primary length: 4.00 days
- Secondary temp: 67.00 F Secondary length: 3.00 days
- Tertiary temp: 52.00 F Tertiary length: 1.00 days

Dry Hop and Bottle/Keg

- Measure Final Gravity: _____ (Estimate: 1.008 SG)
- Carbonation: Keg with 16.06 PSI
- Drink and enjoy!