## Killer Kölsch – Extract

### Kölsch

Recipe for 5 gallons (18.93 L)

Boil Time: 90 minutes

Original Gravity: 1.046 (11° P) Final Gravity: 1.011 (3° P)

SRM: 3° IBU: 21 ABV: 4.8%

#### **Fermentables**

6 lbs (2.72 kg) Liquid pilsen malt extract 3.1 oz (88 g) Vienna malt 3.1 oz (88 g) Caravienne® malt

#### Hops

0.42 oz (12 g) Liberty whole hops, 4.5% aa (first wort hop)
0.8 oz (23 g) German Hallertauer whole hops, 4.3% aa (30 min)
0.3 oz (9 g) Crystal whole hops, 3.5% aa (5 min)

#### Yeast

White Labs WLP029 German Ale/Kolsch or Wyeast 2565 German Kölsch

# Water (optional, your usual brewing water will work, this just gets you closer to style)

Reverse osmosis water treated with 1/4 tsp 10% phosphoric acid per 5 gallons

#### **Process**

- Put 2 gallons (7.6 L) of water in the boil pot and heat to 160°F (71°C). While the water is heating, put the specialty grains (Caravienne malt and Vienna malt) into a grain bag and tie off the ends so the grains can't escape.
- Once the water has reached 150-170°F (65.6-76.7°C), immerse the grain bag in the water for 30 minutes. For more information on steeping specialty grains, visit the Intermediate section of Let's Brew on the AHA website.
- After 30 minutes, remove the grain bag and let it drip until it stops. Add malt extract to the water and stir until totally dissolved.
- Bring to a rolling boil for 90 minutes, add hops at specified intervals from end of boil
- Strain wort into sanitized fermentation vessel with 2-3 gallons (7.6-11.4 L) of preboiled & chilled water for a total volume of 5 gallons (18.9 L)
- Pitch yeast when wort temperature reaches 58°F (14°C), allowing to rise to 68°F (20°C) after 4 days to finish.
- Lager 2 months at 40°F (4°C).