

kolsch 2.0 gotowanie

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **21**
- SRM **4.5**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **63C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Pilzneński | 5 kg (71.4%) | 81 % | 3.5 |
| Grain | Pszeniczny | 1 kg (14.3%) | 85 % | 5 |
| Grain | Bestmalz Carmel Pils | 1 kg (14.3%) | 75 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------|---------|--------|------------|
| Boil | Magnum | 14.29 g | 60 min | 13.5 % |
| Boil | Hersbrucker | 35.71 g | 15 min | 3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------|------|--------|-----------|-------------|
| Wyeast - Kolsch | Ale | Liquid | 178.57 ml | Wyeast Labs |