

Kölsch

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **18**
- SRM **3.6**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.3 liter(s)**
- Total mash volume **17.1 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **13.3 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **60 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Pilzneński | 3 kg (78.9%) | 81 % | 4 |
| Grain | Pszeniczny | 0.5 kg (13.2%) | 85 % | 4 |
| Grain | Bestmalz Carmel Pils | 0.2 kg (5.3%) | 75 % | 5 |
| Grain | Carahell Best | 0.1 kg (2.6%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Centennial | 10 g | 60 min | 9.5 % |
| Boil | Tettnang | 10 g | 15 min | 5 % |
| Boil | Centennial | 10 g | 5 min | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------------|------|--------|--------|-------------|
| Wyeast - 1728 Scottish Ale | Ale | Liquid | 200 ml | Wyeast Labs |