

#17 Kolsch (Klarstein)

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **20**
- SRM **3.9**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **28.1 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 **21.9 liter(s)** of strike water to **56.6C**
- 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 **14.8 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|--------------|-------|-----|
| Grain | Strzegom Pilzneński | 5 kg (80%) | 80 % | 4 |
| Grain | Pszeniczny | 1 kg (16%) | 85 % | 4 |
| Grain | Golden Ale | 0.25 kg (4%) | 78 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Tradition | 30 g | 60 min | 5.5 % |
| Boil | Hallertau Spalt Select | 20 g | 15 min | 4.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|------|------|--------|------------|
| Kolsch Style Ale Yeast | Ale | Dry | 11 g | Lallemand |