

Koelsch ver.1

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **35**
- SRM **3.7**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **5.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **17 %/h**
- Boil size **7.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **5.2 liter(s)**
- Total mash volume **6.5 liter(s)**

Steps

- Temp **54 C**, Time **15 min**
- Temp **65 C**, Time **30 min**
- Temp **75 C**, Time **40 min**

Mash step by step

- Heat up **5.2 liter(s)** of strike water to **58.3C**
- Add grains
- Keep mash **15 min** at **54C**
- Keep mash **30 min** at **65C**
- Keep mash **40 min** at **75C**
- Sparge using **3.6 liter(s)** of **76C** water or to achieve **7.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------|----------------|-------|-----|
| Grain | Pilzneński | 1.1 kg (84.6%) | 81 % | 4 |
| Grain | Pszeniczny | 0.2 kg (15.4%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | lunga | 6.5 g | 60 min | 11 % |
| Boil | Lublin (Lubelski) | 7 g | 10 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|-------|------|--------|------------|
| Safbrew S-33 | Lager | Dry | 4 g | Safbrew |