

## Koelsch ver.2

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **15**
- 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    | Lublin (Lubelski) | 6 g    | 60 min | 4 %        |
| Boil    | Lublin (Lubelski) | 8 g    | 10 min | 4 %        |

### Yeasts

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