

Kolsch

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **21**
- SRM **3.7**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **28.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **34.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **30.6 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **23.8 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **34.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|----------------|--------|-----|
| Grain | Platki owsiane | 0.4 kg (5.9%) | 85 % | 3 |
| Grain | Pilsner (2 Row) Bel | 2.5 kg (36.8%) | 79 % | 4 |
| Grain | Rice, Flaked | 0.5 kg (7.4%) | 70 % | 2 |
| Grain | Pale Malt (2 Row) Bel | 1 kg (14.7%) | 80 % | 6 |
| Grain | Barley, Raw | 2 kg (29.4%) | 60.9 % | 4 |
| Grain | Barley, Flaked | 0.4 kg (5.9%) | 70 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil | Tradition | 15 g | 60 min | 7 % |
| Boil | Saaz (Czech Republic) | 20 g | 60 min | 4.16 % |
| Aroma (end of boil) | Tradition | 15 g | 5 min | 7 % |
| Aroma (end of boil) | Saaz (Czech Republic) | 20 g | 5 min | 4.16 % |
| Whirlpool | Saaz (Czech Republic) | 20 g | 15 min | 5.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| safe ale s33 | Ale | Slant | 150 ml | --- |

Notes

- dodano enzymy do zacieru alfa i beta,
fermentacja w 15 stopniach
Jun 30, 2020, 3:32 PM