

KOELSCH

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **28**
- SRM **4**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **53 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **45 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|--------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 5 kg (83.3%) | 81 % | 5 |
| Grain | Weyermann pszeniczny jasny | 1 kg (16.7%) | 80 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil | Saaz (Czech Republic) | 30 g | 10 min | 4.5 % |
| Boil | Saaz (Czech Republic) | 30 g | 40 min | 4.5 % |
| Aroma (end of boil) | Mittelfruh | 30 g | 50 min | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-33 | Ale | Dry | 11.5 g | Fermentis |