

KOELSH #5

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **19**
- SRM **3.4**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **19.8 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|--------------|-------|-----|
| Grain | Viking Pilsner malt | 4.5 kg (90%) | 82 % | 4 |
| Grain | Chleb żytni | 0.5 kg (10%) | 70 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------|--------|--------|------------|
| Boil | Northern Brewer | 25 g | 60 min | 7.6 % |
| Aroma (end of boil) | Northern Brewer | 25 g | 0 min | 9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------|------|-------|--------|------------|
| lallemand - koeln | Ale | Slant | 200 ml | Lallemand |