

05B. Kölsch

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **25**
- SRM **3.5**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **3 %**
- Size with trub loss **19.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **21.9 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.05 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **17 liter(s)** of strike water to **68.3C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **72C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **21.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------|----------------|-------|-----|
| Grain | Pilznieński | 3.9 kg (92.9%) | 81 % | 4 |
| Grain | Pszeniczny | 0.3 kg (7.1%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------|--------|--------|------------|
| Boil | Magnum | 13 g | 60 min | 11 % |
| Aroma (end of boil) | Spält Select | 30 g | 15 min | 3.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|-------|--------|------------|
| lutra | Ale | Slant | 120 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|--------|--------|-----------|----------|
| Water Agent | CaSO4 | 3 g | Boil | 60 min |
| Flavor | ogórki | 1500 g | Secondary | 5 day(s) |