

kolsh z pk

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **29**
- SRM **4.6**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **70 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|-----------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 3.85 kg (63.1%) | 81 % | 5 |
| Grain | Weyermann pszeniczny jasny | 0.25 kg (4.1%) | 80 % | 6 |
| Grain | Weyermann - Pale Ale Malt | 2 kg (32.8%) | 85 % | 7 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|----------|------------|
| Boil | Hallertau | 50 g | 60 min | 4.5 % |
| Boil | Hallertau | 10 g | 10 min | 4.5 % |
| Boil | English Golding | 25 g | 30 min | 4.8 % |
| Dry Hop | English Golding | 25 g | 0 day(s) | 4.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------|-------|------|--------|------------------------------|
| safale k75 | Lager | Dry | 23 g | rehydratyzacja 300ml wody |