

## Kolsch złote v2

- Gravity **11.7 BLG**
- ABV ---
- IBU **43**
- SRM **4.1**
- Style **Kölsch**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25 liter(s)**

### Steps

- Temp **64 C**, Time **70 min**
- Temp **72 C**, Time **5 min**

### Mash step by step

- Heat up **20 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **70 min** at **64C**
- Keep mash **5 min** at **72C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

| Type  | Name                              | Amount     | Yield | EBC |
|-------|-----------------------------------|------------|-------|-----|
| Grain | Weyermann diastatyczny jęczmienny | 1 kg (20%) | 80 %  | 3   |
| Grain | Weyermann Premium Pilsner ®       | 1 kg (20%) | 80 %  | 2   |
| Grain | Weyermann - Pilsner Malt          | 1 kg (20%) | 81 %  | 5   |
| Grain | Weyermann pszeniczny diastatyczny | 1 kg (20%) | 80 %  | 6   |
| Grain | Strzegom Pilzneński               | 1 kg (20%) | 80 %  | 4   |

### Hops

| Use for    | Name  | Amount | Time   | Alpha acid |
|------------|-------|--------|--------|------------|
| Boil       | Perle | 30 g   | 15 min | 7 %        |
| First Wort | lunga | 25 g   | 60 min | 11 %       |

### Yeasts

| Name                  | Type | Form  | Amount | Laboratory       |
|-----------------------|------|-------|--------|------------------|
| FM42 Stare Nadreńskie | Ale  | Slant | 300 ml | Fermentum Mobile |