

Dzięcioł trójpalczasty - Kolsch

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **23**
- SRM **4.1**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **19.9 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **72C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **19.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|------------|-------|-----|
| Grain | Viking Pilsner malt | 3 kg (75%) | 82 % | 4 |
| Grain | Strzegom Pszeniczny | 1 kg (25%) | 81 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 15 g | 60 min | 5.8 % |
| Boil | Lublin (Lubelski) | 15 g | 10 min | 5.8 % |
| Whirlpool | Hallertau Spalt Select | 30 g | 20 min | 4.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale K-97 | Ale | Dry | 11 g | Fermentis |