

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