

Kolendra

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **15**
- SRM **3.8**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **11.8 liter(s)**
- Total mash volume **15 liter(s)**

Steps

- Temp **63 C**, Time **70 min**

Mash step by step

- Heat up **11.8 liter(s)** of strike water to **68.8C**
- Add grains
- Keep mash **70 min** at **63C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **17.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	1.2 kg (37.5%)	82 %	4
Grain	Viking Pale Ale malt	2 kg (62.5%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	10 g	60 min	5.5 %
Aroma (end of boil)	WAI-ITI	20 g	60 min	1.6 %
Aroma (end of boil)	Relax	5 g	20 min	1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Spice	Kolendra	14 g	Boil	5 min
Spice	Skórka z 1/2 cytryny	5 g	Boil	5 min