

czy to piwo?

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **93**
- SRM **9.5**
- Style **English IPA**

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 **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **22.7 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **76C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **19.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	castlemalting pilsen	3.8 kg (75.2%)	80.5 %	3
Grain	Caramunich® typ I	0.4 kg (7.9%)	73 %	80
Grain	red ale viking malt	0.4 kg (7.9%)	75 %	70
Grain	Žytni	0.45 kg (8.9%)	85 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	54 g	60 min	7.5 %
Aroma (end of boil)	bramling cross	50 g	2 min	5.8 %
Aroma (end of boil)	Fuggles	50 g	2 min	4.5 %
Whirlpool	bramling cross	50 g	30 min	5.8 %
Whirlpool	Fuggles	50 g	30 min	4.5 %
Boil	zula	10 g	60 min	9.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
London Ale III	Ale	Slant	200 ml	---

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	5 g	Mash	60 min