Oszukany pils III

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **35**
- SRM **4.2**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.4 liter(s)**
- Total mash volume **10.8 liter(s)**

Steps

- Temp **50 C**, Time **20 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **8.4 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **7.2 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg *(83.3%)*	81 %	4
Grain	Carahell	0.2 kg *(8.3%)*	77 %	26
Grain	Pszeniczny	0.2 kg *(8.3%)*	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	5 g	45 min	10 %
Boil	Mosaic	5 g	15 min	10 %
Aroma (end of boil)	Ekuanot	10 g	10 min	14 %
Aroma (end of boil)	Mosaic	10 g	10 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	7 g	Fermentis