

pszeniczne

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **11**
- SRM **4.4**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **45 C**, Time **15 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **49.2C**
- Add grains
- Keep mash **15 min** at **45C**
- Keep mash **40 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3 kg (57.7%)	80 %	7
Grain	Pszeniczny	1 kg (19.2%)	85 %	4
Grain	Pszenica niesłodowana	1 kg (19.2%)	75 %	3
Adjunct	płatki owsiane	0.2 kg (3.8%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30 g	20 min	4 %
Boil	Lublin (Lubelski)	18 g	10 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's - Belgian Wit M21	Wheat	Dry	10 g	Mangrove Jack's