

Pierwsze Zacierane Polskie Ale

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **40**
- SRM **4**
- Style **American Pale Ale**

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 **3.15 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18.5 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **75.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.2 kg (94.4%)	81 %	4
Grain	Karmelowy Jasny 30EBC	0.25 kg (5.6%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	30 g	10 min	4 %
Dry Hop	Lublin (Lubelski)	35 g	7 day(s)	4 %

Yeasts

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