

Polish PALE ALE

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **50**
- SRM **4.3**
- Style **Extra Special/Strong Bitter (English 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 **27.5 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	4 kg (80%)	80.5 %	6
Grain	BESTMALZ - Best Vienna	0.5 kg (10%)	80.5 %	9
Grain	BESTMALZ - Best Wheat Malt	0.5 kg (10%)	82 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga-szyszka	40 g	60 min	11 %
Aroma (end of boil)	izabella	25 g	5 min	5 %
Aroma (end of boil)	Sybilla	65 g	5 min	3.5 %
Whirlpool	izabella	25 g	---	5 %
Whirlpool	Sybilla	65 g	---	3.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis