

Komunijne

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **22**
- SRM **5.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **32 liter(s)**
- Trub loss **5 %**
- Size with trub loss **33.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **42.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **29 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **21.8 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **72C**
- Sparge using **27.8 liter(s)** of **76C** water or to achieve **42.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg (69%)	80 %	7
Grain	Karmelowy Jasny 30EBC	0.25 kg (3.4%)	75 %	30
Grain	Pilzeński	2 kg (27.6%)	80 %	10

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	30 g	50 min	6 %
Boil	Cascade	15 g	25 min	6 %
Boil	Cascade	15 g	5 min	6 %
Boil	Centennial	15 g	10 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Bulldog universal ale	Ale	Slant	500 ml	Bulldog

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	2 g	Mash	60 min

Fining	Karagen	2.5 g	Boil	10 min
Other	pożywka	2 g	Boil	5 min