

Filipowe - Kooperacja Browar Jacyno

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **30**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **76C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (83.3%)	80 %	5
Grain	Strzegom Pilzniejszy	1 kg (16.7%)	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	11 %
Aroma (end of boil)	Mosaic	30 g	10 min	10 %
Whirlpool	Citra	15 g	10 min	12 %
Whirlpool	Cascade	15 g	10 min	6 %
Dry Hop	Mosaic	30 g	5 day(s)	10 %
Dry Hop	Citra	15 g	5 day(s)	12 %
Dry Hop	Cascade	15 g	5 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	12.5 g	---