

Piwa brak - do roboty!

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **22**
- SRM **5.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.3 liter(s)**

Mash information

- Mash efficiency **81 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.1 liter(s)**

Steps

- Temp **65 C**, Time **55 min**
- Temp **73 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **72C**
- Add grains
- Keep mash **55 min** at **65C**
- Keep mash **10 min** at **73C**
- Keep mash **5 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.5 kg (66.7%)	79 %	6
Grain	Strzegom Wiedeński	1 kg (19%)	79 %	10
Grain	cookie	0.25 kg (4.8%)	75 %	50
Grain	Płatki owsiane	0.5 kg (9.5%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	5 g	60 min	12.4 %
Whirlpool	Galaxy	30 g	10 min	15 %
Whirlpool	citra	22 g	10 min	12.5 %
Whirlpool	Lublin (Lubelski)	30 g	10 min	4 %
Dry Hop	Galaxy	30 g	3 day(s)	15 %
Dry Hop	Citra	30 g	3 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM21 Odkrycie sezonu	Ale	Slant	150 ml	Fermentum Mobile