

Polskie jasne EXP20

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **36**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **0 %**
- Size with trub loss **15 liter(s)**
- Boil time **30 min**
- Evaporation rate **20 %/h**
- Boil size **16.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.3 liter(s)**
- Total mash volume **15 liter(s)**

Steps

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

Mash step by step

- Heat up **11.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (80%)	80 %	5
Grain	Weyermann - Carapils	0.25 kg (6.7%)	78 %	4
Grain	Płatki owsiane	0.5 kg (13.3%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amora Preta	20 g	15 min	9.3 %
Boil	Amora Preta	30 g	5 min	9.3 %
Boil	lunga	8 g	30 min	11.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lalle	Lager	Dry	11 g	Lallemand