

polskie ale ala supraskie

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **29**
- SRM **4.8**
- Style **American 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 **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (95.2%)	80 %	5
Grain	Karmelowy Jasny 30EBC	0.25 kg (4.8%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20.77 g	60 min	9.4 %
Aroma (end of boil)	Lublin (Lubelski)	20 g	10 min	4.7 %
Aroma (end of boil)	Oktawia	20 g	10 min	5.7 %
Dry Hop	Lublin (Lubelski)	20 g	3 day(s)	4.7 %
Dry Hop	Oktawia	20 g	3 day(s)	5.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis