

Apa

- Gravity **9.3 BLG**
- ABV **3.6 %**
- IBU **30**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **16.7 liter(s)**

Steps

- Temp **67 C**, Time **75 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **13 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.2 kg (86.5%)	80 %	5
Grain	Płatki orkiszowe	0.2 kg (5.4%)	80 %	4
Grain	Słód Caramunich Typ II Weyermann	0.15 kg (4.1%)	73 %	120
Grain	Caramel/Crystal Malt - 10L	0.15 kg (4.1%)	75 %	20

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %
Aroma (end of boil)	Cascade	20 g	30 min	6 %
Aroma (end of boil)	Cascade	20 g	1 min	6 %
Dry Hop	Cascade	80 g	7 day(s)	6 %
Dry Hop	Simcoe	50 g	7 day(s)	13.2 %

Yeasts

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

Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	10 g	Boil	20 min