

Apa

- Gravity **13.1 BLG**
- ABV ---
- IBU **44**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (90%)	80 %	5
Grain	Pszeniczny	0.5 kg (10%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	13.5 %
Boil	Galaxy	10 g	10 min	15 %
Boil	Cascade	10 g	10 min	6 %
Boil	Galaxy	10 g	5 min	15 %
Boil	Cascade	10 g	5 min	6 %
Whirlpool	Cascade	10 g	1 min	6 %
Whirlpool	Galaxy	10 g	1 min	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis