

Apa papa

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **19**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **28.8 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6.2 kg (86.1%)	80 %	5
Grain	Żytni	1 kg (13.9%)	85 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	50 g	60 min	5.2 %
Aroma (end of boil)	Zula	30 g	0 min	7 %

Yeasts

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