

APA

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **47**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **31.7 liter(s)**
- Total mash volume **40.8 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.33 kg (14.7%)	80 %	5
Grain	Oats, Flaked	1.07 kg (11.8%)	80 %	2
Grain	Strzegom Pszeniczny	6.67 kg (73.5%)	81 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	33.33 g	60 min	14.7 %
Boil	Columbus/Tomahawk/Zeus	20 g	30 min	14.7 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	33.33 g	5 min	15.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Liquid	66.67 ml	FM