

Forest

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **38**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (46.2%)	82 %	4
Grain	Viking Pale Ale malt	2.5 kg (38.5%)	80 %	5
Grain	Viking Wheat Malt	1 kg (15.4%)	83 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	15.5 %
Whirlpool	Ahtanum	20 g	0 min	5 %
Boil	lunga	15 g	30 min	11 %
Dry Hop	Sorachi Ace	25 g	3 day(s)	10 %
Dry Hop	Mosaic	20 g	3 day(s)	10 %
Dry Hop	Citra	20 g	3 day(s)	12 %