- Gravity 12.6 BLG
- ABV 5.1 %
- IBU 54
- SRM 5
- Style American Pale Ale

Batch size

- Expected quantity of finished beer 14 liter(s)
- Trub loss 0 % ٠
- Size with trub loss 14.4 liter(s) •
- Boil time 30 min
- Evaporation rate 12 %/h Boil size 17.5 liter(s)

Mash information

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg ٠
- Mash size 10.9 liter(s) .
- Total mash volume 14.6 liter(s)

Steps

- Temp 66 C, Time 75 min
 Temp 75 C, Time 10 min

Mash step by step

- Heat up 10.9 liter(s) of strike water to 73.7C
- Add grains
- Keep mash 75 min at 66C •
- ٠ Keep mash 10 min at 75C
- Sparge using 10.3 liter(s) of 76C water or to achieve 17.5 liter(s) of wort •

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	Viking Pale Ale Malt	3.5 kg <i>(95.9%)</i>	80 %	7
Grain	Cara-Pils/Dextrine	0.15 kg <i>(4.1%)</i>	72 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Vic Secret	13 g	30 min	15.5 %
Boil	Columbus (Tomahawk)	11 g	20 min	14 %
Boil	Cascade	10 g	15 min	5.5 %
Boil	Galaxy	10 g	10 min	14 %
Boil	Azacca	10 g	5 min	15 %
Boil	Azacca	10 g	0 min	15 %
Boil	Galaxy	10 g	0 min	14 %

Yeasts

Name	Туре	Form	Amount	Laboratory
Safale American	Ale	Dry	11 g	DCL/Fermentis

Extras

Туре	Name	Amount	Use for	Time
Water Agent	Phosphoric Acid 85%	4 g	Mash	60 min