

IPA

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **23**
- SRM **4.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **67 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (83.3%)	80 %	5
Grain	Wiedenski Malt	0.5 kg (8.3%)	79 %	7
Grain	Pilzneński	0.5 kg (8.3%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	5 g	60 min	13.2 %
Aroma (end of boil)	Cascade	10 g	15 min	6 %
Aroma (end of boil)	Simcoe	25 g	10 min	13.2 %
Whirlpool	Cascade	50 g	1 min	6 %
Dry Hop	Amarillo	50 g	4 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Slant	200 ml	Fermentis