

Apa srapa

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **44**
- SRM **3.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **24.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **16.8 liter(s)**

Steps

- Temp **68 C**, Time **80 min**

Mash step by step

- Heat up **12.8 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **80 min** at **68C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **24.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1 kg (25%)	80 %	5
Grain	Simpsons - Maris Otter	1.7 kg (42.5%)	81 %	3
Grain	Żytni	1 kg (25%)	85 %	6
Grain	Płatki owsiane	0.3 kg (7.5%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	5 g	60 min	13.9 %
Boil	Strata	5 g	60 min	15.3 %
Aroma (end of boil)	Strata	10 g	10 min	15.3 %
Aroma (end of boil)	Citra	10 g	10 min	13.2 %
Aroma (end of boil)	Strata	10 g	3 min	15.3 %
Aroma (end of boil)	Citra	10 g	3 min	13.2 %
Whirlpool	Strata	10 g	15 min	15.3 %
Whirlpool	Citra	10 g	15 min	13.2 %
Dry Hop	Strata	20 g	5 day(s)	15.3 %
Dry Hop	Citra	20 g	5 day(s)	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Voss Kveik	Ale	Slant	200 ml	Lallemand