

Zula + Oktawia

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **23**
- SRM **4.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **69 C**, Time **45 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **45 min** at **69C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (83.3%)	80 %	5
Grain	Pilzneński	1 kg (16.7%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	12 %
Dry Hop	Izabella	100 g	3 day(s)	10 %
Dry Hop	Zula	90 g	3 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Slant	150 ml	Danstar