

IPA

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **39**
- SRM **4.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.4 liter(s)**
- Total mash volume **16.6 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.3 kg (79.5%)	80 %	5
Grain	Pszeniczny	0.55 kg (13.3%)	85 %	4
Grain	Płatki owsiane	0.3 kg (7.2%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	5 g	60 min	13.9 %
Boil	Columbus/Tomahawk/Zeus	10 g	10 min	13.9 %
Boil	Cascade	15 g	10 min	6 %
Boil	Azacca	13 g	10 min	14 %
Aroma (end of boil)	Azacca	20 g	3 min	14 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	fermentis