

a1

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **34**
- SRM **14.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	5 kg (90.9%)	80.5 %	2
Grain	Carafa II	0.2 kg (3.6%)	70 %	812
Grain	Strzegom Karmel 150	0.3 kg (5.5%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %
Aroma (end of boil)	Cascade	25 g	20 min	6 %
Aroma (end of boil)	Citra	25 g	10 min	12 %
Dry Hop	Citra	10 g	7 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Lager	Dry	5 g	---