

hoppy ale

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **38**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **45 min**
- Evaporation rate **10 %/h**
- Boil size **16.8 liter(s)**

Mash information

- Mash efficiency **73 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **18 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	0.6 kg (20%)	85 %	4
Grain	Viking Pale Ale malt	2 kg (66.7%)	80 %	5
Grain	Weyermann - Vienna Malt	0.3 kg (10%)	81 %	8
Grain	Caramel/Crystal Malt - 10L	0.1 kg (3.3%)	75 %	20

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	24 g	45 min	7 %
Boil	Kazbek	10 g	10 min	6.5 %
Boil	Lublin (Lubelski)	10 g	10 min	4 %
Whirlpool	Kazbek	10 g	15 min	6.5 %
Whirlpool	Tomyski	13 g	15 min	3.5 %
Dry Hop	citra i centennial	15 g	3 day(s)	12 %
Dry Hop	Kazbek	25 g	3 day(s)	7 %
Dry Hop	Lublin (Lubelski)	25 g	3 day(s)	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
k97	Ale	Dry	11 g	fermentis