

Hazy

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **35**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **15 min**
- Evaporation rate **10 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **68 C**, Time **15 min**
- Temp **62 C**, Time **15 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **15 min** at **68C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (57.1%)	85 %	7
Grain	Oats, Flaked	1 kg (19%)	80 %	2
Grain	Pszeniczny	1 kg (19%)	85 %	4
Sugar	Milk Sugar (Lactose)	0.25 kg (4.8%)	76.1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	El Dorado	30 g	15 min	12.2 %
Whirlpool	El Dorado	70 g	7 min	12.2 %
Whirlpool	Centennial	50 g	7 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Verdant IPA	Ale	Dry	22 g	Lallemand

Extras

Type	Name	Amount	Use for	Time
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Water Agent	Chlorek wapnia	1.5 g	Boil	0 min
Water Agent	Gips piwowarski	2 g	Boil	0 min
Water Agent	Sól epsam	3 g	Boil	0 min