

CLEAN APA

- Gravity **11.7 BLG**
- ABV ---
- IBU **32**
- SRM **5.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.5 kg (54.3%)	79 %	6
Grain	Pilzniejszy	0.6 kg (13%)	81 %	4
Grain	Pszeniczny	1 kg (21.7%)	85 %	4
Grain	Weyermann - Carabelge	0.2 kg (4.3%)	80 %	35
Grain	Strzegom Monachijski typ I	0.3 kg (6.5%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	20 g	45 min	10.5 %
Boil	Simcoe	10 g	10 min	13.2 %
Boil	Jarrylo	15 g	5 min	15 %
Boil	Simcoe	15 g	0 min	13.2 %
Boil	Jarrylo	15 g	0 min	15 %
Dry Hop	Jarrylo	40 g	5 day(s)	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	11 g	Mangrove Jack's