

APA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **31**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **15 min**

Mash step by step

- Heat up **17.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **75C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	4.5 kg (77.6%)	80.5 %	6
Grain	BESTMALZ - Best Wheat Malt	0.6 kg (10.3%)	82 %	4
Grain	weyermann - abbey malt	0.2 kg (3.4%)	75 %	45
Grain	Platki owsiane	0.5 kg (8.6%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Dry Hop	Citra	100 g	3 day(s)	12.7 %
Dry Hop	Mosaic	100 g	3 day(s)	11.5 %
Whirlpool	Centennial	100 g	3 min	10.5 %
Boil	Equinox	20 g	45 min	13.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	1000 ml	Fermentum Mobile