

APA2020_BIG

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **43**
- SRM **4.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38.3 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **4.7 liter(s) / kg**
- Mash size **40 liter(s)**
- Total mash volume **48.5 liter(s)**

Steps

- Temp **63 C**, Time **25 min**
- Temp **66 C**, Time **10 min**
- Temp **72 C**, Time **25 min**

Mash step by step

- Heat up **40 liter(s)** of strike water to **67.6C**
- Add grains
- Keep mash **25 min** at **63C**
- Keep mash **10 min** at **66C**
- Keep mash **25 min** at **72C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **38.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop Pilzneński	8 kg (94.1%)	79 %	4
Grain	Strzegom Karmel 30	0.5 kg (5.9%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	40 g	60 min	13.5 %
Aroma (end of boil)	Cascade	50 g	3 min	6 %
Dry Hop	Citra	100 g	3 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
oslo	Ale	Slant	50 ml	---