

## APA 042019

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- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **30**
- SRM **3.3**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.9 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop Pilszeński	5 kg (90.9%)	79 %	4
Grain	Płatki pszeniczne	0.5 kg (9.1%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	15.5 %
Aroma (end of boil)	Citra	15 g	1 min	12 %
Aroma (end of boil)	Cascade	15 g	1 min	6 %
Aroma (end of boil)	Mosaic	15 g	1 min	10 %
Dry Hop	Citra	20 g	3 day(s)	12 %
Dry Hop	Mosaic	20 g	3 day(s)	10 %
Dry Hop	Cascade	20 g	3 day(s)	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us	Ale	Dry	11 g	---