

## aipa 2019.11

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- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **40**
- SRM **11.2**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **28.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **35 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

### Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **22.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **20 liter(s)** of **76C** water or to achieve **35 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale	4.5 kg (60%)	80 %	6
Grain	Strzegom Monachijski typ I	2 kg (26.7%)	79 %	30
Grain	caramel dark	1 kg (13.3%)	75 %	90

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum goryczkowy	30 g	60 min	11.5 %
Boil	Marynka	10 g	30 min	9 %
Boil	perle	20 g	30 min	7 %
Boil	Fuggles aromat	20 g	10 min	4.5 %
Aroma (end of boil)	Fuggles aromat	30 g	0 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	100 ml	Safale