

## APA 21

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- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **45**
- SRM **4.8**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (85.1%)	80 %	5
Grain	Karmelowy Jasny 30EBC	0.2 kg (4.3%)	75 %	30
Grain	Monachijski	0.5 kg (10.6%)	80 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	11 %
Boil	Centennial	15 g	15 min	9 %
Boil	Centennial	15 g	5 min	10.5 %
Whirlpool	Centennial	30 g	15 min	10.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	10 g	Fermentis