

## exp/2/20 single hop

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- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **28**
- SRM **3.8**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **70 C**, Time **5 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **70C**
- Keep mash **10 min** at **72C**
- Sparge using **21 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (83.3%)	80 %	5
Grain	Strzegom Pilzneński	0.5 kg (8.3%)	80 %	4
Grain	Pszoniczny	0.5 kg (8.3%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Rody Hodowlane 2/20 (EXP 2/20)	20 g	60 min	9.3 %
Aroma (end of boil)	Rody Hodowlane 2/20 (EXP 2/20)	40 g	10 min	9.3 %
Dry Hop	Rody Hodowlane 2/20 (EXP 2/20)	40 g	1 day(s)	9.3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Fermentis