

## takie se#

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **34**
- SRM **5.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **28.9 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **25.2 liter(s)**

### Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **19.6 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.6 kg (56.3%)	80 %	4
Grain	Strzegom Monachijski typ I	1 kg (15.6%)	79 %	16
Grain	Strzegom Wiedeński	1 kg (15.6%)	79 %	10
Adjunct	Pszenica niestodowana	0.8 kg (12.5%)	75 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	20 g	30 min	13.6 %
Aroma (end of boil)	Enigma (AUS)	10 g	5 min	16.4 %
Aroma (end of boil)	Amarillo	10 g	5 min	7.1 %
Whirlpool	Chinook	20 g	20 min	12.8 %
Whirlpool	Equinox	10 g	20 min	13.6 %
Dry Hop	Enigma (AUS)	20 g	5 day(s)	16.4 %
Dry Hop	Citra	30 g	5 day(s)	12.5 %
Dry Hop	Chinook	20 g	5 day(s)	12.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis