

## American Wheat - podwojna porcja (high gravity brewing)

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- Gravity **20.5 BLG**
- ABV **9 %**
- IBU **28**
- SRM **5.6**

### Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **34.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **33 liter(s)**

### Steps

- Temp **44 C**, Time **30 min**
- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **22 liter(s)** of strike water to **50C**
- Add grains
- Keep mash **30 min** at **44C**
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **23.2 liter(s)** of **76C** water or to achieve **34.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg (54.5%)	80 %	5
Grain	Pszeniczny	3.9 kg (35.5%)	85 %	4
Grain	Pilzneński	1 kg (9.1%)	81 %	4
Grain	Monachijski	0.1 kg (0.9%)	80 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	24 g	60 min	12 %
Boil	Simcoe	26 g	10 min	13.2 %
Boil	Mosaic	26 g	5 min	10 %
Aroma (end of boil)	Citra	24 g	0 min	12 %
Aroma (end of boil)	Simcoe	24 g	0 min	13.2 %
Aroma (end of boil)	Mosaic	24 g	0 min	10 %
Dry Hop	Cascade	60 g	0 day(s)	6 %
Dry Hop	Amarillo	50 g	0 day(s)	9.5 %

### Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale US-05	Wheat	Dry	11.5 g	Fermentis