

## #5

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **35**
- SRM **18**
- Style **American Brown Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **28.8 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**

### Mash step by step

- Heat up **21.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (69.4%)	80 %	5
Grain	Strzegom Karmel 150	0.5 kg (6.9%)	75 %	150
Grain	Carafa II	0.2 kg (2.8%)	70 %	812
Grain	Strzegom Pilzneński	1 kg (13.9%)	80 %	4
Grain	Biscuit Malt	0.5 kg (6.9%)	--- %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Willamette	25 g	60 min	5 %
Aroma (end of boil)	Citra	25 g	5 min	12 %
Boil	Marynka	20 g	60 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	12 g	Safale