

Brown Ale

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **30**
- SRM **25.6**
- Style **American Brown Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **23.4 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **23.4 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzniejszy	3.1 kg (52.9%)	80 %	4
Grain	Strzegom Pszeniczny	0.2 kg (3.4%)	81 %	6
Grain	Jęczmień palony	0.2 kg (3.4%)	55 %	985
Grain	Strzegom Karmel 300	0.212 kg (3.6%)	70 %	299
Grain	Strzegom Czekoladowy ciemny	0.15 kg (2.6%)	68 %	1200
Grain	Strzegom Karmel 600	0.1 kg (1.7%)	68 %	601
Grain	Viking Pale Ale malt	1.9 kg (32.4%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook PL	25 g	60 min	8.6 %
Boil	Chinook PL	20 g	20 min	8.5 %
Aroma (end of boil)	Chinook PL	20 g	1 min	8.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew US-05	Ale	Slant	100 ml	---