

# Brown ALE Orzeszek

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **33**
- SRM **26.7**
- Style **American Brown Ale**

## Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.9 liter(s)**
- Total mash volume **27.9 liter(s)**

## Steps

- Temp **68 C**, Time **65 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **20.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **65 min** at **68C**
- Keep mash **0 min** at **78C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski typ II 20-25 EBC Weyermann	4 kg (57.3%)	80 %	20
Grain	Weyermann - Pale Ale Malt	2 kg (28.7%)	85 %	7
Grain	Carared 40-50 EBC Weyermann	0.3 kg (4.3%)	75 %	39
Grain	Carabohemian 170-220 EBC Weyermann	0.3 kg (4.3%)	75 %	185
Grain	Barwiący	0.3 kg (4.3%)	55 %	985
Grain	Słód Chocolate 1100-1250 EBC Thomas Fawcett	0.08 kg (1.1%)	55 %	1100

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Chinook	30 g	5 min	13 %
Boil	Sterling	30 g	50 min	4.5 %
Aroma (end of boil)	Liberty	30 g	65 min	4.5 %
Whirlpool	Ahtanum	30 g	10 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	170 ml	Fermentum Mobile
Starter z gęstwy i suchego ekstraktu zrobiony 48h przed dodaniem.				