

# American Brown Ale #1 - Browar na Wyżynie

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **25**
- SRM **18.6**
- Style **American Brown Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **6 %**
- Size with trub loss **22.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

## Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **16.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	pale ale Viking Malt	3.5 kg (62.5%)	80 %	6
Grain	wiedeński Viking Malt	0.5 kg (8.9%)	79 %	9
Grain	Cara Gold Castle Malting	0.3 kg (5.4%)	78 %	120
Grain	caramel pale - Viking Malt	0.3 kg (5.4%)	75 %	8
Grain	brown Fawcett	0.3 kg (5.4%)	72 %	200
Grain	Caffe Castle Malting	0.3 kg (5.4%)	75.5 %	500
Grain	Płatki owsiane pełnoziarniste błyskawiczne	0.4 kg (7.1%)	70 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	lunga (Polishhops) - granulata	10 g	100 min	10 %
Boil	Idaho 7 (Usa Hops)	14 g	15 min	12 %
Aroma (end of boil)	Idaho 7 (Usa Hops)	14 g	5 min	12 %

Dry Hop	Idaho 7 (Usa Hops)	28 g	3 day(s)	12 %
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## Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką kratę	Ale	Slant	400 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Water Agent	chlorek wapnia	6 g	Mash	70 min
Water Agent	gips	2 g	Mash	70 min
Water Agent	kreda	4 g	Mash	70 min
Water Agent	kwas fosforowy 75% wysładzanie	2 g	Mash	70 min
Fining	mech irlandzki	2 g	Boil	15 min

## Notes

- <https://www.brewersfriend.com/mash-chemistry-and-brewing-water-calculator/?id=BD3XNXL>  
 Ca+2 Mg+2 Na+ Cl- SO4-2 HCO  
 78.4 0.0 131.0 97.2 57.2 105.139  
 Mash pH \*: 5.56  
 SO42-/Cl- ratio: 0.6 Very Malty  
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