

Ale angielskie

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **28**
- SRM **4.7**
- Style **Extra Special/Strong Bitter (English Pale 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 **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

Steps

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

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	2 kg (35.7%)	80 %	4
Grain	Weyermann - Wiedeński	1 kg (17.9%)	79 %	8
Grain	Weyermann - Pale Ale Malt	2 kg (35.7%)	85 %	7
Grain	Oats, Flaked płatki owsiane	0.6 kg (10.7%)	80 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggle	30 g	60 min	5 %
Boil	East Kent Goldings	30 g	10 min	4.7 %
Boil	East Kent Goldings	30 g	0 min	4.7 %
Boil	Marynka	10 g	60 min	6.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	11.5 g	Fermentis
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Extras

Type	Name	Amount	Use for	Time
Fining	tabletki	2.5 g	Boil	15 min