

Jasne, że Angielskie

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **17**
- SRM **9.7**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **73 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **53 C**, Time **10 min**
- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **57.7C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (54.5%)	85 %	7
Grain	Strzegom Wiedeński	1 kg (18.2%)	79 %	10
Grain	Pszeniczny	1 kg (18.2%)	85 %	4
Grain	Strzegom Karmel 150	0.5 kg (9.1%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	archer	30 g	60 min	5 %
Aroma (end of boil)	archer	20 g	5 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM11 Wichrowe Wzgórza	Ale	Liquid	300 ml	Fermentum Mobile