

## Smak zwycięstwa

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **37**
- SRM **25.1**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **75 min**
- Evaporation rate **14 %/h**
- Boil size **20.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.7 liter(s)**
- Total mash volume **13 liter(s)**

### Steps

- Temp **69 C**, Time **75 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **9.7 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **75 min** at **69C**
- Keep mash **5 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **20.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pale Ale	2.03 kg (62.8%)	79 %	6
Grain	Słód Monachijski typ II	0.75 kg (23.3%)	78 %	22
Grain	Słód czekoladowy	0.19 kg (5.8%)	68 %	400
Grain	Słód Pale Chocolate	0.19 kg (5.8%)	--- %	625
Grain	Słód Carafa Special typ III	0.08 kg (2.3%)	65 %	1400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	11.5 %
Boil	Magnum	7.5 g	30 min	11.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP002 - English Ale Yeast	Ale	Slant	0.75 ml	White Labs

### Extras

Type	Name	Amount	Use for	Time
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Flavor	Laktoza	405 g	Boil	5 min
Flavor	Ziarna kakaowca	75 g	Secondary	10 day(s)
Flavor	Maliny	0.75 g	Secondary	10 day(s)