

## Szpieg v2.0

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- Gravity **14.7 BLG**
- ABV ---
- IBU **31**
- SRM **44.4**
- Style **Oatmeal Stout**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

### Steps

- Temp **68 C**, Time **90 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **17.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4 kg (70.2%)	85 %	7
Grain	Płatki owsiane	0.5 kg (8.8%)	85 %	3
Grain	Fawcett - Amber	0.2 kg (3.5%)	80 %	120
Grain	Melanoiden Malt	0.2 kg (3.5%)	80 %	39
Grain	Fawcett - Czekoladowy	0.2 kg (3.5%)	81 %	1200
Grain	Fawcett - Pale Chocolate	0.2 kg (3.5%)	71 %	600
Grain	Fawcett - Black	0.15 kg (2.6%)	55 %	1200
Grain	Fawcett - Crystal malt	0.25 kg (4.4%)	75 %	160

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Willamette	50 g	60 min	5 %
Boil	East Kent Goldings	25 g	15 min	5.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Wyeast - London Ale III	Ale	Slant	200 ml	Wyeast Labs
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## Notes

- Płatki owsiane opiekane 50% w piekarniku .  
*Dec 12, 2016, 4:52 PM*