

## 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 |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                         |     |       |        |             |
|-------------------------|-----|-------|--------|-------------|
| Wyeast - London Ale III | Ale | Slant | 200 ml | Wyeast Labs |
|-------------------------|-----|-------|--------|-------------|

## Notes

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