

stout wytrawny

- Gravity **8.5 BLG**
- ABV **3.3 %**
- IBU **26**
- SRM **24.1**

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 **25.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **10.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|-------|------|
| Grain | Weyermann - Pale Ale Malt | 3.2 kg (88.9%) | 79 % | 7 |
| Grain | carafa typ 2 | 0.1 kg (2.8%) | 65 % | 1100 |
| Grain | Jęczmień palony | 0.3 kg (8.3%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | English Golding | 15 g | 60 min | 4.8 % |
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| Boil | Marynka | 10 g | 60 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us 04 | Ale | Dry | 11.5 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------|------------------|--------|---------|--------|
| Other | płatki jeczienne | 500 g | Boil | 60 min |