

Wytrawny Wróbel - Dry Stout

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **12**
- SRM **23.4**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **24.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **13.9 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **13.9 liter(s)** of strike water to **73.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **76C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **24.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 3.2 kg (78%) | 85 % | 7 |
| Grain | Carafa II | 0.1 kg (2.4%) | 70 % | 812 |
| Grain | Jęczmień palony | 0.3 kg (7.3%) | 55 % | 985 |
| Grain | Płatki jęczmienne błyskawiczne | 0.5 kg (12.2%) | 50 % | 1 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | English Golding | 15 g | 60 min | 4.7 % |
| Boil | English Golding | 15 g | 10 min | 4.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Fermentis |