

## W tajenj służbie jej królewskiej mości

- Gravity **24.2 BLG**
- ABV **11.2 %**
- IBU **50**
- SRM **14.2**
- Style **English Barleywine**

### Batch size

- Expected quantity of finished beer **9 liter(s)**
- Trub loss **5 %**
- Size with trub loss **9.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **13 %/h**
- Boil size **12 liter(s)**

### Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **2.4 liter(s) / kg**
- Mash size **10.4 liter(s)**
- Total mash volume **14.8 liter(s)**

### Steps

- Temp **68 C**, Time **70 min**
- Temp **77 C**, Time **15 min**

### Mash step by step

- Heat up **10.4 liter(s)** of strike water to **78C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **15 min** at **77C**
- Sparge using **6 liter(s)** of **76C** water or to achieve **12 liter(s)** of wort

### Fermentables

| Type  | Name                      | Amount         | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 3.2 kg (73.6%) | 85 %  | 7   |
| Grain | Płatki owsiane            | 0.4 kg (9.2%)  | 85 %  | 3   |
| Grain | Biscuit Malt              | 0.5 kg (11.5%) | 79 %  | 45  |
| Grain | Crystal - Castle Malting  | 0.25 kg (5.7%) | 78 %  | 150 |

### Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Magnat | 30 g   | 60 min | 11.2 %     |

### Yeasts

| Name           | Type | Form  | Amount | Laboratory |
|----------------|------|-------|--------|------------|
| Empire Ale M15 | Ale  | Slant | 200 ml | ---        |