

O czym szumią wierzby

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **33**
- SRM **7.9**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **14 %/h**
- Boil size **22.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.7 liter(s)**
- Total mash volume **16.9 liter(s)**

Steps

- Temp **65 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12.7 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **90 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **22.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Słód Pilznieński | 3.8 kg (89.8%) | 79 % | 4 |
| Grain | Słód karmelowy 50 (czerwony) | 0.35 kg (8.3%) | 74 % | 50 |
| Grain | Słód czekoladowy jasny | 0.08 kg (1.9%) | 68 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Fuggles | 40 g | 60 min | 4.2 % |
| Boil | Fuggles | 15 g | 15 min | 4.2 % |
| Boil | East Kent Golding | 15 g | 15 min | 4.6 % |
| Aroma (end of boil) | Cascade | 20 g | 2 min | 7.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------|------|--------|---------|------------|
| WLP005 - British Ale Yeast | Ale | Liquid | 1000 ml | White Labs |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|----------------|-----|------|--------|
| Fining | Mech irlandzki | 4 g | Boil | 10 min |
|--------|----------------|-----|------|--------|