

Dziesiątkowe Wariacje I

- Gravity **10.1 BLG**
- ABV ---
- IBU **46**
- SRM **10.2**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **21.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.7 liter(s)**
- Total mash volume **11.6 liter(s)**

Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **8.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **21.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Pilzneński | 0.6 kg (20.7%) | 81 % | 4 |
| Grain | Strzegom Monachijski typ II | 1.8 kg (62.1%) | 79 % | 22 |
| Grain | Melanoiden Malt | 0.5 kg (17.2%) | 80 % | 39 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------|--------|--------|------------|
| Boil | Polaris | 5 g | 60 min | 20 % |
| Boil | Tradition | 15 g | 60 min | 5.9 % |
| Boil | Tradition | 15 g | 20 min | 5.9 % |
| Boil | Polaris | 5 g | 20 min | 20 % |
| Aroma (end of boil) | Lubelski | 10 g | 5 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|-------|------|--------|------------|
| S23 | Lager | Dry | 11 g | --- |