

Pierwsze Październik 2020

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **22**
- SRM **4.2**

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 **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **62 C**, Time **35 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **35 min** at **62C**
- Keep mash **25 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------|----------------|-------|-----|
| Grain | Pilzneński | 3.5 kg (77.8%) | 81 % | 4 |
| Grain | Monachijski | 0.5 kg (11.1%) | 80 % | 16 |
| Grain | Żytni | 0.5 kg (11.1%) | 85 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 20 g | 60 min | 5.6 % |
| Boil | Marynka | 10 g | 15 min | 6.5 % |
| Boil | Tradition | 10 g | 15 min | 4.3 % |
| Aroma (end of boil) | Tradition | 20 g | 5 min | 4.3 % |
| Aroma (end of boil) | Lublin (Lubelski) | 10 g | 5 min | 5.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Safale |