

# 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     |