

z ostatkiow

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **4.5**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|---------------|-------|-----|
| Grain | Pilzneński | 4.8 kg (80%) | 81 % | 4 |
| Grain | Strzegom Wiedeński | 0.2 kg (3.3%) | 79 % | 8 |
| Grain | Monachijski | 1 kg (16.7%) | 80 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 60 g | 60 min | 3.4 % |
| Boil | Saaz (Czech Republic) | 30 g | 5 min | 4.4 % |
| Boil | Lublin (Lubelski) | 20 g | 15 min | 3.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 10 g | --- |