

Polski Bitter

- Gravity **11.9 BLG**
- ABV ---
- IBU **49**
- SRM **6.6**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.3 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **76C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 3.5 kg (81.4%) | 79 % | 6 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (11.6%) | 79 % | 16 |
| Grain | Strzegom Karmel 30 | 0.3 kg (7%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|----------|------------|
| Boil | Marynka | 30 g | 60 min | 8 % |
| Boil | Lublin (Lubelski) | 50 g | 25 min | 4 % |
| Aroma (end of boil) | Lublin (Lubelski) | 50 g | 5 min | 4 % |
| Dry Hop | Lublin (Lubelski) | 50 g | 5 day(s) | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |