

Polskie Ale

- Gravity **11.9 BLG**
- ABV ---
- IBU **43**
- SRM **4.5**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

Steps

- Temp **62 C**, Time **15 min**
- Temp **66 C**, Time **25 min**
- Temp **70 C**, Time **20 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **25 min** at **66C**
- Keep mash **20 min** at **70C**
- Keep mash **10 min** at **77C**
- Sparge using **18.2 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 4.6 kg (95.8%) | 80 % | 4 |
| Grain | Karmelowy Czerwony | 0.2 kg (4.2%) | 75 % | 59 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 30 g | 60 min | 10 % |
| Boil | Lublin (Lubelski) | 20 g | 30 min | 4 % |
| Boil | Sybilla | 20 g | 10 min | 3.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |