

Polish Pale Ale

- Gravity **12.9 BLG**
- ABV ---
- IBU **37**
- SRM **12.4**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

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 **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **60 C**, Time **10 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **66.7C**
- Add grains
- Keep mash **10 min** at **60C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 4 kg (85.1%) | 79 % | 6 |
| Grain | Karmelowy Pszeniczny Strzegom | 0.5 kg (10.6%) | 79 % | 130 |
| Grain | Żytni | 0.2 kg (4.3%) | 85 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil | lunga | 20 g | 60 min | 11 % |
| Boil | lunga | 10 g | 30 min | 11 % |
| Whirlpool | lunga | 20 g | 0 min | 11 % |
| Dry Hop | lunga | 50 g | 3 day(s) | 11 % |
| Dry Hop | Chinook | 50 g | 3 day(s) | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 10 g | Safbrew |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------|--------|---------|--------|
| Fining | Irish Moss | 3 g | Boil | 15 min |