

polish pale ale (junga,marynka,lubelski,perle)

- Gravity **12.6 BLG**
- ABV ---
- IBU **45**
- SRM **9.6**
- Style **American 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 **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Strzegom Karmel 150 | 0.3 kg (6.5%) | 75 % | 150 |
| Grain | Strzegom pszeniczny | 0.3 kg (6.5%) | 81 % | 6 |
| Grain | Strzegom Pilzneński | 4 kg (87%) | 80 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|----------|------------|
| Boil | lunga | 23 g | 60 min | 11 % |
| Boil | Lublin (Lubelski) | 20 g | 25 min | 3.5 % |
| Boil | Lublin (Lubelski) | 10 g | 5 min | 3.5 % |
| Aroma (end of boil) | Lublin (Lubelski) | 10 g | 20 min | 3.5 % |
| Aroma (end of boil) | Perle | 10 g | 20 min | 7 % |
| Whirlpool | Perle | 10 g | 30 min | 7 % |
| Whirlpool | Lublin (Lubelski) | 10 g | 30 min | 3.5 % |
| Whirlpool | Marynka | 10 g | 30 min | 11 % |
| Dry Hop | Marynka | 15 g | 7 day(s) | 11 % |
| Dry Hop | Perle | 15 g | 7 day(s) | 7 % |
| Dry Hop | lub | 15 g | 7 day(s) | 3.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|-------------|-------------|---------------|-------------------|
| Safale S-05 | Ale | Slant | 100 ml | Safale |