

Polskie Ale

- Gravity **11.9 BLG**
- ABV ---
- IBU **34**
- SRM **9.7**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **30 liter(s)**

Steps

- Temp **66 C**, Time **90 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **77.5C**
- Add grains
- Keep mash **90 min** at **66C**
- Sparge using **40.6 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|-------------|-------|-----|
| Grain | Pszeniczny | 1 kg (10%) | 85 % | 4 |
| Grain | Strzegom Pilzneński | 8 kg (80%) | 80 % | 4 |
| Grain | Optima Karmel 150 | 0.5 kg (5%) | 80 % | 150 |
| Grain | Optima Karmel 30 | 0.5 kg (5%) | 80 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|--------|------------|
| Boil | Magnum | 33 g | 60 min | 11.5 % |
| Boil | Perle | 50 g | 15 min | 7 % |
| Aroma (end of boil) | Perle | 50 g | 0 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------------------|------|-------|--------|-----------------|
| Mangrove Jack's M54 California Lager | Ale | Slant | 300 ml | Mangrove Jack's |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | Mech Irlandzki | 10 g | Boil | 10 min |