

Polskie Pale Ale „debiut” WARKA #1

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **20**
- SRM **6.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **75C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|--------------|-------|-----|
| Grain | Słód PALE ALE/PILS Bydgoszcz | 2.5 kg (50%) | 80 % | 4.5 |
| Grain | Słód MONACHIJSKI 17 EBC Bydgoszcz | 2.5 kg (50%) | 81 % | 17 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------------|--------|----------|------------|
| Boil | Marynka (goryczkowy) | 15 g | 60 min | 10 % |
| Boil | Lubelski (aromatyczny) | 20 g | 15 min | 4 % |
| Aroma (end of boil) | Cascade PL (aromatyczny) | 15 g | 0 min | 5.2 % |
| Dry Hop | Lublin (Lubelski) | 30 g | 7 day(s) | 4 % |
| Dry Hop | Cascade PL | 30 g | 7 day(s) | 5.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US 05 | Ale | Dry | 11.5 g | --- |