

Pale Ale

- Gravity **11.9 BLG**
- ABV ---
- IBU **56**
- SRM **5.9**
- 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 **80 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **68 C**, Time **30 min**
- Temp **75.6 C**, Time **10 min**

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **68C**
- Keep mash **10 min** at **75.6C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|-----------------|-------|-----|
| Grain | Pilzneński | 2.55 kg (59.3%) | 81 % | 4 |
| Grain | Monachijski | 1.4 kg (32.6%) | 80 % | 16 |
| Grain | Karmelowy Jasny 30EBC | 0.35 kg (8.1%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 40 g | 60 min | 10 % |
| Boil | Lublin (Lubelski) | 40 g | 10 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale | Dry | 11 g | Danstar |