

2# Polska IPA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **68**
- SRM **6.8**
- Style **English IPA**

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 **5 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **22.7 liter(s)**

Steps

- Temp **54 C**, Time **10 min**
- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **58.9C**
- Add grains
- Keep mash **10 min** at **54C**
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Pilzneński | 2.2 kg (43.6%) | 81 % | 4 |
| Grain | Monachijski | 2.5 kg (49.5%) | 80 % | 16 |
| Grain | Karmelowy Jasny 30EBC | 0.35 kg (6.9%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|----------|------------|
| Boil | Marynka | 50 g | 60 min | 10 % |
| Boil | Lublin (Lubelski) | 40 g | 5 min | 4 % |
| Boil | lunga | 50 g | 5 min | 11 % |
| Dry Hop | lunga | 50 g | 3 day(s) | 11 % |

Yeasts

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