

Gazda

- Gravity **12.1 BLG**
- ABV ---
- IBU **41**
- SRM **10.6**
- Style **English IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.44 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **21.3 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **70 C**, Time **10 min**
- Temp **74 C**, Time **5 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **70C**
- Keep mash **5 min** at **74C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Pilzneński | 2 kg (41.7%) | 81 % | 4 |
| Grain | Pale Ale | 1 kg (20.8%) | 80 % | 4 |
| Grain | Monachijski typ II Strzegom | 1 kg (20.8%) | 80 % | 39 |
| Grain | Pszeniczny | 0.5 kg (10.4%) | 85 % | 4 |
| Grain | Abbey Castle | 0.3 kg (6.3%) | 75 % | 89 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Equinox | 20 g | 60 min | 13.4 % |
| Aroma (end of boil) | Sybilla | 20 g | 10 min | 5.9 % |
| Aroma (end of boil) | Simcoe | 20 g | 5 min | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|---------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 1000 ml | Fermentum Mobile |