

Pollawy

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **71**
- SRM **18.3**
- Style **Brown IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18.7 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **40 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 2.5 kg (53.5%) | 80 % | 5 |
| Grain | Strzegom Pilzneński | 2 kg (42.8%) | 80 % | 4 |
| Grain | Strzegom Czekoladowy ciemny | 0.17 kg (3.6%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|-----------|------------|
| Boil | puławski | 40 g | 60 min | 8.9 % |
| Boil | puławski | 20 g | 40 min | 8.9 % |
| Boil | puławski | 10 g | 30 min | 8.9 % |
| Dry Hop | puławski | 20 g | 14 day(s) | 8.9 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|--------|------|--------|-----------|-----------|
| Flavor | zest | 10 g | Secondary | 14 day(s) |