

braggot

- Gravity **20.7 BLG**
- ABV **9.2 %**
- IBU **35**
- SRM **14.4**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|---------------|----------------|-------|-----|
| Grain | Maris Otter | 1.7 kg (33.3%) | 81 % | 6 |
| Grain | Żytni | 1 kg (19.6%) | 85 % | 8 |
| Grain | Cara 30 EBC | 0.2 kg (3.9%) | 78 % | 30 |
| Grain | Biscuit Malt | 0.1 kg (2%) | 79 % | 45 |
| Liquid Extract | Miód wrzosowy | 2.1 kg (41.2%) | 70 % | 40 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------------|--------|--------|------------|
| Boil | Magnat PH 2019 | 30 g | 25 min | 12.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 250 ml | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|--------|---------|--------|
| Water Agent | chlerek wapnia | 4 g | Mash | 60 min |