

# 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 |