

## BGotnh

- Gravity **22 BLG**
- ABV **9.9 %**
- IBU **27**
- SRM **25**
- Style **Specialty Beer**

### Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.7 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.3 liter(s)**
- Total mash volume **15 liter(s)**

### Steps

- Temp **40 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **11.3 liter(s)** of strike water to **43.3C**
- Add grains
- Keep mash **10 min** at **40C**
- Keep mash **30 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **17.7 liter(s)** of wort

### Fermentables

| Type           | Name               | Amount         | Yield | EBC |
|----------------|--------------------|----------------|-------|-----|
| Grain          | Viking Munich Malt | 2 kg (28.4%)   | 78 %  | 18  |
| Grain          | Amber Malt         | 0.5 kg (7.1%)  | 75 %  | 43  |
| Grain          | Rye Malt           | 0.25 kg (3.5%) | 63 %  | 10  |
| Grain          | Biscuit Malt       | 1 kg (14.2%)   | 79 %  | 45  |
| Liquid Extract | Miód spadziowy     | 3.3 kg (46.8%) | 50 %  | 60  |

### Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Sybilla           | 50 g   | 60 min | 3.5 %      |
| Aroma (end of boil) | Lublin (Lubelski) | 50 g   | 10 min | 4 %        |

### Yeasts

| Name                | Type | Form | Amount | Laboratory      |
|---------------------|------|------|--------|-----------------|
| Mangrove Jack's M05 | Wine | Dry  | 10 g   | Mangrove Jack's |

### Extras

| Type                      | Name           | Amount | Use for | Time  |
|---------------------------|----------------|--------|---------|-------|
| Other                     | Miód spadziowy | 3300 g | Boil    | 0 min |
| Gęstość wzrosła do 19 BLG |                |        |         |       |