

## Coraz bliżej święta...

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **19**
- SRM **36.4**
- Style **Christmas/Winter Specialty Spiced 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **54 C**, Time **15 min**

### Mash step by step

- Heat up **12.6 liter(s)** of strike water to **59.7C**
- Add grains
- Keep mash **15 min** at **54C**
- Keep mash **60 min** at **68C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

### Fermentables

| Type  | Name                                | Amount         | Yield  | EBC  |
|-------|-------------------------------------|----------------|--------|------|
| Grain | Barke Wiedeński                     | 1 kg (23.8%)   | 80.5 % | 6    |
| Grain | Thomas Fawcett Maris Otter Pale Ale | 1 kg (23.8%)   | 80 %   | 6    |
| Grain | Biscuit Malt                        | 0.5 kg (11.9%) | 79 %   | 45   |
| Grain | Special B Malt                      | 0.5 kg (11.9%) | 65.2 % | 400  |
| Grain | Pszeniczny                          | 0.5 kg (11.9%) | 85 %   | 4    |
| Grain | Viking Pilsner malt                 | 0.5 kg (11.9%) | 82 %   | 4    |
| Grain | Carafa II                           | 0.2 kg (4.8%)  | 70 %   | 1100 |

### Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Saaz (Czech Republic) | 30 g   | 20 min | 4.5 %      |
| Boil    | Marynka               | 5 g    | 50 min | 10 %       |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew T-58 | Ale  | Dry  | 11.5 g | Safale     |

### Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

| Type   | Name              | Amount | Use for | Time   |
|--------|-------------------|--------|---------|--------|
| Spice  | Cynamon           | 8.4 g  | Boil    | 10 min |
| Spice  | Suszony imbir     | 3.6 g  | Boil    | 10 min |
| Spice  | Goździki          | 2.4 g  | Boil    | 10 min |
| Spice  | Kardamon          | 1.8 g  | Boil    | 10 min |
| Spice  | Czarny pieprz     | 1.2 g  | Boil    | 10 min |
| Spice  | Anyż              | 1.2 g  | Boil    | 10 min |
| Flavor | Skórka pomarańczy | 36 g   | Boil    | 10 min |