

Świąteczne

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **15**
- SRM **38.5**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 2 kg (52.6%) | 80 % | 5 |
| Grain | Pszeniczny | 1 kg (26.3%) | 85 % | 4 |
| Grain | Płatki owsiane | 0.4 kg (10.5%) | 60 % | 7.4 |
| Grain | Barwiący | 0.2 kg (5.3%) | 55 % | 985 |
| Grain | Czekoladowy | 0.2 kg (5.3%) | 60 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------------------|--------|--------|------------|
| Boil | Hallertau Mittelfruh | 20 g | 50 min | 4 % |
| Whirlpool | Hallertau Mittelfruh | 10 g | 10 min | 4 % |