

Świąteczne

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **29**
- SRM **19.7**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **66 C**, Time **75 min**

Mash step by step

- Heat up **21.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **75 min** at **66C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------------------------------------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 4 kg (56.3%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 1 kg (14.1%) | 79 % | 16 |
| Grain | Caramunich® typ I | 0.3 kg (4.2%) | 73 % | 80 |
| Grain | Special B Castle | 0.4 kg (5.6%) | 70 % | 350 |
| Grain | Weyermann - Carafa I | 0.2 kg (2.8%) | 70 % | 690 |
| Dodane na koniec zacierania, 10 min | | | | |
| Grain | Płatki owsiane | 1.2 kg (16.9%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 30 g | 60 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|---------|------------------|
| FM52 Amerykański Sen | Ale | Liquid | 1500 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|-------|----------------------------|-------|------|-------|
| Spice | Cynamon | 15 g | Boil | 1 min |
| Spice | Kardamon | 5 g | Boil | 1 min |
| Other | Skórką z trzech pomarańczy | 0 g | Boil | 1 min |
| Spice | Łuska kakaowa | 140 g | Boil | 1 min |