

# Świąteczne

---

- Gravity **14.7 BLG**
- ABV ---
- IBU **27**
- SRM **47.6**
- Style **Spice, Herb, or Vegetable 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 **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **9.1 liter(s)**
- Total mash volume **12.8 liter(s)**

## Steps

- Temp **52 C**, Time **20 min**
- Temp **69 C**, Time **45 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **9.1 liter(s)** of strike water to **58.4C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **45 min** at **69C**
- Keep mash **15 min** at **76C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount         | Yield  | EBC  |
|-------|----------------------------------|----------------|--------|------|
| Grain | Strzegom Pale Ale                | 1.5 kg (39%)   | 79 %   | 6    |
| Grain | Strzegom Monachijski typ II      | 1 kg (26%)     | 79 %   | 22   |
| Grain | Thomas Fawcett Halcyon           | 0.5 kg (13%)   | 80.5 % | 5    |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.5 kg (13%)   | 73 %   | 1001 |
| Grain | Jęczmień palony                  | 0.15 kg (3.9%) | 55 %   | 985  |
| Sugar | Milk Sugar (Lactose)             | 0.2 kg (5.2%)  | 76.1 % | 0    |

## Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Target | 15 g   | 60 min | 10.5 %     |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11 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     |
|--------|---------------------|--------|-----------|----------|
| Fining | mech irlandzki      | 2 g    | Boil      | 10 min   |
| Other  | pożywka dla drożdży | 1.5 g  | Boil      | 15 min   |
| Spice  | cynamon             | 8 g    | Boil      | 20 min   |
| Spice  | cynamon             | 8 g    | Secondary | 5 day(s) |
| Flavor | skórki bergamotki   | 20 g   | Secondary | 7 day(s) |
| Spice  | goździki            | 2 g    | Boil      | 10 min   |
| Spice  | gałka muskatołowa   | 5 g    | Boil      | 10 min   |
| Flavor | wanilia w laskach   | 2 g    | Secondary | 5 day(s) |