

robust świąteczny

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **27**
- SRM **31.6**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **6 %**
- Size with trub loss **24.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **28.1 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **23.1 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **18.2 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|------------------------------|---------------|--------|-----|
| Grain | pale ale Soufflet | 4 kg (57.1%) | 80 % | 8 |
| Grain | Strzegom Karmel 150 | 0.2 kg (2.9%) | 75 % | 150 |
| Grain | cherry wędzony | 0.2 kg (2.9%) | 60 % | 788 |
| Grain | Special B Malt | 0.2 kg (2.9%) | 65.2 % | 315 |
| Grain | Wędzony olchą Viking Malt | 1 kg (14.3%) | 82 % | 10 |
| Grain | Płatki owsiane | 0.5 kg (7.1%) | 85 % | 3 |
| Liquid Extract | Sok z śliwki suszonej | 0.4 kg (5.7%) | --- % | --- |
| Grain | Briess - Dark Chocolate Malt | 0.2 kg (2.9%) | 60 % | 827 |
| Grain | Caraaroma | 0.1 kg (1.4%) | 78 % | 400 |
| Grain | obłuszczony Barwiący | 0.2 kg (2.9%) | 68 % | 900 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | Bramling | 50 g | 60 min | 5.2 % |
| Boil | Minstrel UK | 20 g | 15 min | 4.9 % |
| Boil | Styrian Golding | 10 g | 15 min | 5 % |

Yeasts

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

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 22 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|------------|--------|---------|--------|
| Fining | Irish Moss | 5 g | Boil | 15 min |
| Water Agent | gips | 5 g | Mash | --- |