

## 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	---