

# Porter Świąteczny

- Gravity **19.4 BLG**
- ABV **8.36 %**
- IBU **17.03**
- SRM **40**
- Style **Baltic Porter**

## Batch size

- Expected quantity of finished beer **15.3 liter(s)**
- Trub loss **0 %**
- Size with trub loss **15.3 liter(s)**
- Boil time **30 min**
- Evaporation rate **22 %/h**
- Boil size **18.8 liter(s)**

## Mash information

- Mash efficiency **69.5 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.94 liter(s)**
- Total mash volume **23.92 liter(s)**

## Steps

- Temp **68 C**, Time **40 min**

## Mash step by step

- Heat up **17.94 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **18.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Munich Light	2 kg	78.26 %	15
Grain	Vienna	1.33 kg	80.43 %	8
Grain	Pilsner	1.33 kg	78.26 %	3
Grain	Caramunich Type 1	0.67 kg	72.83 %	92
Grain	CaraAroma	0.33 kg	78.26 %	372
Grain	Chocolate Wheat	0.16 kg	75.65 %	1106
Grain	Carafa III	0.16 kg	69.57 %	1426

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	13.3 g	30 min	10 %
Boil	Marynka	6.66 g	5 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
LALBREW® VOSS KVEIK ALE YEAST		Dry	73.7 g	Lallemand

## Extras

Type	Name	Amount	Use for	Time
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Water Agent	Citric acid	3.28 g	Mash	0 min
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