

Świąteczne

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **34**
- SRM **37.4**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **16.4 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **19.8 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **15.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **5 min** at **76C**
- Sparge using **5.4 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (79.5%)	80 %	5
Grain	Castle Cafe	0.3 kg (6.8%)	80 %	500
Grain	Weyermann - Chocolate Wheat	0.3 kg (6.8%)	74 %	788
Grain	Weyermann Specjal W	0.3 kg (6.8%)	68 %	300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	50 min	11 %

Extras

Type	Name	Amount	Use for	Time
Spice	skórka z 3 pomarańczy	0 g	Boil	10 min
Spice	goździki 8 sztuk	0 g	Boil	10 min
Spice	kardamon 5 sztuk	0 g	Boil	10 min
Flavor	ekstrakt wanilowy	80 g	Bottling	---