

Na Boże Narodzenie

- Gravity **21.1 BLG**
- ABV **9.4 %**
- IBU **29**
- SRM **8.6**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **19.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.15 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **17 liter(s)** of strike water to **74.5C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **78C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **19.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4.7 kg (87%)	85 %	7
Grain	Carabelge	0.3 kg (5.6%)	80 %	30
Grain	Caramunich® typ I	0.2 kg (3.7%)	73 %	80
Grain	Płatki owsiane	0.2 kg (3.7%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	60 g	50 min	3.7 %
Boil	Styrian Golding	30 g	15 min	3.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis Safbrew BE-256	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Flavor	Pomarańcza słodka	15 g	Boil	15 min

Spice	Kolendra	5.5 g	Boil	15 min
Spice	Cynamon	3.2 g	Boil	15 min
Spice	Imbir w proszku	2.1 g	Boil	15 min