

odCzapy

- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **11**
- SRM **21.5**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **3 %/h**
- Boil size **24.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **26.4 liter(s)**
- Total mash volume **35.2 liter(s)**

Steps

- Temp **65 C**, Time **20 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**
- Temp **100 C**, Time **60 min**

Mash step by step

- Heat up **26.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **20 min** at **65C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Keep mash **60 min** at **100C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **24.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	6 kg (68.2%)	85 %	7
Grain	Strzegom Monachijski typ II	1 kg (11.4%)	79 %	22
Grain	Viking melanoidynowy	0.3 kg (3.4%)	75 %	60
Grain	Strzegom Karmel 300	0.3 kg (3.4%)	70 %	299
Grain	Strzegom Karmel 600	0.1 kg (1.1%)	68 %	601
Grain	Strzegom Czekoladowy 1200	0.1 kg (1.1%)	68 %	1202
Grain	Barley, Flaked	1 kg (11.4%)	70 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	25 g	50 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	20 g	Safale

Extras

Type	Name	Amount	Use for	Time
Spice	imbir	10 g	Boil	10 min
Spice	przyprawa do piernika	40 g	Boil	1 min
Spice	zest pomaranczowy	20 g	Secondary	3 day(s)
Spice	zest cytrynowy	20 g	Secondary	3 day(s)
Spice	Laska wanilii	1 g	Boil	30 min