

Świąteczne

- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **30**
- SRM **34.5**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27 liter(s)**
- Total mash volume **36 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	7 kg (77.8%)	80 %	5
Grain	Carafa III	0.5 kg (5.6%)	70 %	1034
Grain	Płatki owsiane	0.5 kg (5.6%)	60 %	3
Grain	Strzegom Karmel 150	1 kg (11.1%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chmiel Marynka PL	30 g	35 min	9 %
Boil	Perle	20 g	30 min	7 %
Boil	Chmiel Lubelski PL	15 g	20 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Spice	Goździki	20 g	Boil	10 min
Spice	Cynamon	15 g	Boil	10 min
Spice	Imbir	20 g	Boil	10 min
Spice	Kardamon	20 g	Boil	10 min
Spice	Ziele Angielskie	10 g	Boil	10 min
Spice	Gałka muszkatowa	10 g	Boil	10 min