

Świąteczne

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **37**
- SRM **34.4**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **25 min**
- Evaporation rate **10 %/h**
- Boil size **12 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **14 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (50%)	80 %	5
Grain	Płatki owsiane	0.4 kg (10%)	85 %	3
Grain	Strzegom Monachijski typ II	0.7 kg (17.5%)	79 %	22
Grain	Strzegom Karmel 150	0.7 kg (17.5%)	75 %	150
Grain	Jęczmień palony	0.1 kg (2.5%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.1 kg (2.5%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	12 g	60 min	15.5 %
Boil	Saaz (USA)	15 g	5 min	3.75 %
Boil	Styrian Golding	15 g	5 min	3.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	100 ml	Safale

Extras

Type	Name	Amount	Use for	Time
Spice	Imbir	50 g	Boil	5 min
Spice	Cynamon	40 g	Boil	5 min
Spice	Skórka pomarańczy (szt.)	2 g	Boil	5 min
Spice	Goździk (szt.)	15 g	Boil	5 min
Spice	Kardamon (szt.)	1 g	Boil	5 min

Spice	Anyż	1 g	Boil	5 min
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