

# Świąteczne

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **12**
- SRM **16.4**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Malt Pilsneński	6 kg (75%)	80.5 %	2
Grain	Viking Malt Monachijski typ I	1 kg (12.5%)	79 %	16
Grain	Viking Malt Karmel 150	0.2 kg (2.5%)	75 %	150
Grain	Viking Malt Karmel 300	0.2 kg (2.5%)	70 %	299
Grain	Viking Malt Czekoladowy 400	0.4 kg (5%)	68 %	400
Grain	Viking Malt Barwiący	0.2 kg (2.5%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	50 g	30 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Spice	Piernik	100 g	Boil	10 min

## Notes

- Piernik: cynamon + kardamon + imbir + goździk + kolendra + kakao + ziele angielskie  
*Sep 12, 2017, 9:08 PM*