

Świąteczne

- Gravity **21.3 BLG**
- ABV ---
- IBU **48**
- SRM **40**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.5 kg (76.9%)	79 %	6
Grain	Strzegom Karmel 600	0.2 kg (3.4%)	68 %	601
Grain	Jęczmień palony	0.1 kg (1.7%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.1 kg (1.7%)	68 %	1200
Sugar	Candi Sugar, Dark	0.25 kg (4.3%)	78.3 %	542
Liquid Extract	Honey	0.7 kg (12%)	75 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	10 %
Boil	Lublin (Lubelski)	40 g	15 min	4 %

Yeasts

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

Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Flavor	wanilia	3 g	Boil	10 min
Spice	przyprawa piernikowa	30 g	Boil	10 min
Flavor	anyż	1 g	Boil	10 min

Notes

- Przyprawa piernikowa składająca się z;
pieprz, goździki, kakao, imbir, ziele angielskie, cynamon, kolendra, gałka muszkatołowa.
Wanilia 1/2 laski, anyż 1 gwiazdka.
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