

ŚWIĄTECZNE ALE 17 Blg # 31

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **34**
- SRM **20.7**
- 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 **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **17.2 liter(s)**
- Total mash volume **21.5 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **17.2 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (64.5%)	80 %	5
Grain	Karmelowy Jasny 30EBC	0.1 kg (2.2%)	75 %	30
Grain	Strzegom Czekoladowy ciemny	0.1 kg (2.2%)	68 %	1200
Grain	Carafa II	0.1 kg (2.2%)	70 %	812
Grain	Strzegom Monachijski typ I	1 kg (21.5%)	79 %	16
Liquid Extract	Miód Gryczany (Buckwheat Honey)	0.35 kg (7.5%)	70 %	40

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	60 min	15.5 %
Boil	Willamette	15 g	10 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	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
Spice	skórka słodkiej pomarańczy	20 g	Boil	10 min
Spice	skórka gorzkiej pomarańczy	10 g	Boil	10 min
Spice	skórki suszonej cytryny	10 g	Boil	10 min
Spice	zest z pomarańczy	30 g	Boil	10 min
Spice	goździki	5 g	Boil	10 min
Spice	kardamon	5 g	Boil	10 min
Spice	anyż	2 g	Boil	10 min
Spice	kolendra	10 g	Boil	10 min
Spice	imbir mielony	2 g	Boil	10 min
Spice	gałka muszkatołowa	2 g	Boil	10 min