

# Ale Święta

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **24**
- SRM **8.7**
- 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 **17.3 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **65 C**, Time **45 min**
- Temp **70 C**, Time **15 min**

## Mash step by step

- Heat up **17.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **70C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód pilzneński 3,2-4,5 EBC Strzegom	4.5 kg (76.8%)	80 %	4
Grain	Słód biscuit 50 EBC Castlemalting	0.7 kg (11.9%)	77 %	50
Grain	Karmelowy Jasny 30EBC Strzegom	0.5 kg (8.5%)	75 %	30
Grain	Strzegom Czekoladowy 400	0.05 kg (0.9%)	68 %	400
Sugar	cukier brązowy	0.11 kg (1.9%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Savinjski Golding	70 g	60 min	2.9 %
Boil	Tradition	15 g	10 min	6.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Belgian Triple M31	Ale	Slant	500 ml	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Spice	Mieszanka do piernika	12 g	Boil	5 min