

Wesołych Świąt

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **19**
- SRM **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 **14 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **74 C**, Time **10 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **74C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilzneński Castle Malting	2.6 kg (59.1%)	--- %	3
Grain	Słód Monachijski Strzegom	0.8 kg (18.2%)	78 %	16
Grain	Słód Carahell Weyermann	0.2 kg (4.5%)	74 %	25
Grain	Słód Biscuit Castle Malting	0.2 kg (4.5%)	77 %	50
Grain	Płatki owsiane	0.2 kg (4.5%)	85 %	3
Grain	Słód karmelowy 50 Strzegom	0.2 kg (4.5%)	68 %	50
Sugar	Laktoza	0.2 kg (4.5%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggle	30 g	60 min	4.2 %
Boil	Fuggle	15 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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FM53 Voss kveik	Ale	Slant	1 ml	Fermentum Mobile
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Extras

Type	Name	Amount	Use for	Time
Spice	Przyprawa do piernika	20 g	Boil	5 min
Flavor	Skórki słodkiej pomarańczy	10 g	Boil	5 min