

Święta HO!HO!HO!

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **66**
- SRM **25.1**
- 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 **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **53 C**, Time **10 min**
- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **50 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2.5 kg (36.5%)	82 %	4
Grain	Monachijski	1 kg (14.6%)	80 %	16
Grain	Strzegom Bursztynowy	1 kg (14.6%)	70 %	49
Grain	Barley, Flaked	0.5 kg (7.3%)	70 %	4
Grain	Viking melanoidynowy	0.6 kg (8.8%)	75 %	60
Grain	Strzegom Karmel 600	0.2 kg (2.9%)	68 %	601
Grain	Strzegom Czekoladowy jasny	0.2 kg (2.9%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.1 kg (1.5%)	68 %	1200
Sugar	Milk Sugar (Lactose)	0.25 kg (3.6%)	76.1 %	0
Sugar	Brown Sugar, Light	0.5 kg (7.3%)	100 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
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Boil	Sabro	40 g	60 min	15 %
Boil	Centennial	20 g	15 min	10.5 %
Dry Hop	Sabro	10 g	7 day(s)	15 %
Dry Hop	Centennial	20 g	7 day(s)	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew T-58	Ale	Dry	23 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Spice	Przyprawa do Piernika	35 g	Boil	5 min
Flavor	skórka pomarańczowa	25 g	Boil	5 min
Spice	Kakao	5 g	Boil	5 min