

Ho Ho Ho

- Gravity **17.1 BLG**
- ABV ---
- IBU **45**
- SRM **62.5**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.2 liter(s)**
- Total mash volume **14.4 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **11.2 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **10 min** at **72C**
- Sparge using **4.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2 kg (62.5%)	79 %	6
Grain	Strzegom Czekoladowy 1200	0.2 kg (6.3%)	68 %	1202
Grain	Caraaroma	0.5 kg (15.6%)	78 %	400
Grain	Weyermann - Melanoiden Malt	0.5 kg (15.6%)	81 %	53

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Boil	Lublin (Lubelski)	30 g	5 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	---

Extras

Type	Name	Amount	Use for	Time
Spice	Miód wielokwiatowy	200 g	Boil	10 min

Spice	przyprawa do piernika	20 g	Boil	10 min
Flavor	wanilia	0.5 g	Boil	10 min
Spice	korzeń lukrecji	10 g	Boil	5 min
Spice	skórki pomarańczy	10 g	Boil	10 min
Spice	anyż	3 g	Boil	5 min