

Meet under mistletoe

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **45**
- SRM **24.2**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.7 liter(s)**
- Total mash volume **18.2 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **13.7 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **10 min** at **76C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **16.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	1.5 kg (33%)	82 %	4
Grain	Viking Pale Ale malt	1.5 kg (33%)	80 %	5
Grain	Abbey Malt Weyermann	0.25 kg (5.5%)	75 %	45
Grain	Strzegom Monachijski typ II	1 kg (22%)	79 %	22
Grain	Strzegom Czekoladowy jasny	0.15 kg (3.3%)	68 %	400
Grain	Weyermann pszeniczny czekoladowy	0.15 kg (3.3%)	65 %	1050

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	15 g	60 min	15.5 %
Aroma (end of boil)	Warrior	15 g	10 min	15.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Ale	Dry	11.5 g	---

Extras

Type	Name	Amount	Use for	Time
Spice	kolendra	40 g	Boil	10 min
Spice	skórka pomarańczy słodkiej	40 g	Boil	10 min
Spice	skórka pomarańczy gorzkiej	40 g	Boil	10 min