

Zimowe

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **21**
- SRM **16.9**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **2 %**
- Size with trub loss **22.7 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **28 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

Steps

- Temp **66 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **28 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (72.5%)	80 %	5
Grain	Strzegom Czekoladowy jasny	0.3 kg (4.3%)	68 %	400
Grain	Strzegom Monachijski typ II	0.5 kg (7.2%)	79 %	22
Grain	Jęczmień palony	0.1 kg (1.4%)	55 %	1000
Grain	Żytni	1 kg (14.5%)	85 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	50 g	45 min	5.1 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon kora	17 g	Boil	30 min

Spice	Imbir mielony	6 g	Boil	15 min
Spice	Gałka muszkatołowa 0.5 łyżeczki	1 g	Boil	15 min
Spice	Pieprz kubeba łyżeczka	2 g	Boil	15 min
Spice	Kordamon czarny 5szt	2 g	Boil	15 min
Spice	Goździki 2 łyżeczki	3 g	Boil	15 min
Spice	Kolendra 4 łyżeczki	10 g	Boil	15 min
Spice	Curacao	50 g	Boil	15 min
Spice	Laska wanilii 1szt	1 g	Boil	15 min
Spice	Anyż 2szt	2 g	Boil	15 min