Zimowe

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **29**
- SRM **41.1**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **29.6 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **22.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg *(50.6%)*	79 %	6
Grain	Strzegom Monachijski typ I	1 kg *(12.7%)*	79 %	16
Grain	Strzegom Karmel 150	0.5 kg *(6.3%)*	75 %	150
Grain	Extra black	0.2 kg *(2.5%)*	65 %	1400
Grain	Strzegom Czekoladowy ciemny	0.2 kg *(2.5%)*	68 %	1200
Grain	Jęczmień palony	0.5 kg *(6.3%)*	55 %	1000
Grain	Płatki owsiane	1 kg *(12.7%)*	85 %	3
Sugar	Brown Sugar, Light	0.5 kg *(6.3%)*	100 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	bez chmielu	0 g	10 min	1 %
timer: 10min				
Boil	Marynka	10 g	60 min	10 %
Boil	Magnum	20 g	60 min	13.5 %

Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

Extras

Type	Name	Amount	Use for	Time
Spice	laktoza	500 g	Boil	15 min
Spice	przyprawy różne	0 g	Boil	10 min

cynamon
kolendra
goździki
ziele angielskie mielone
gałka muszkatołowa
imbir
kardamon
skórka pomarańczy
skórka cytryny

miód gryczany 700g