Beer di Natale

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **26**
- SRM **28.3**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **3 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **27.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (Maris Otter) UK	5 kg *(74%)*	80.3 %	5.3
Grain	Aromatic Malt Belgian	0.5 kg *(7.4%)*	78 %	100
Grain	Crystal Malt UK	0.5 kg *(7.4%)*	72 %	90
Grain	Carawheat	0.19 kg *(2.8%)*	77 %	125
Grain	Pszeniczny Czekoladowy	0.1 kg *(1.5%)*	73 %	1001
Grain	Jęczmień palony	0.3 kg *(4.4%)*	55 %	985
Adjunct	Oat Flakes	0.17 kg *(2.5%)*	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	50 g	60 min	4.5 %
Boil	Saaz (Czech Republic)	25 g	15 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory

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

Safbrew T-58	Ale	Dry	11 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Flavor	skórka z 2 pomarańczy	0 g	Boil	15 min
Spice	goździki 5szt.	0 g	Boil	15 min
Spice	imbir świeży	50 g	Boil	15 min
Spice	kardamon - pół łyż.	0 g	Boil	15 min
Spice	cynamon - 1 kora	0 g	Boil	15 min
Spice	gałka muszkatołowa - pół kulki	0 g	Boil	15 min

Notes

- może laktoze by dodać...
  Oct 21, 2017, 11:52 PM