

Christmas ale

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **23**
- SRM **32.6**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **0 %**
- Size with trub loss **19 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **25.6 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **73 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **25.6 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **73C**
- Keep mash **10 min** at **76C**
- Sparge using **3.8 liter(s)** of **76C** water or to achieve **23 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg (78.1%)	80 %	7
Grain	Strzegom Monachijski typ I	0.5 kg (7.8%)	79 %	16
Grain	Płatki orkiszowe	0.4 kg (6.3%)	60 %	4
Grain	Strzegom Czekoladowy ciemny	0.25 kg (3.9%)	68 %	1200
Grain	Jęczmień palony	0.25 kg (3.9%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	50 g	60 min	3.5 %
Aroma (end of boil)	Oktawia	30 g	5 min	7.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Us 05	Ale	Dry	11 g	Fermentis