

X-mas Ale

- Gravity **19.6 BLG**
- ABV ---
- IBU **35**
- SRM **39.9**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10.7 %/h**
- Boil size **27 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

Steps

- Temp **68 C**, Time **45 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **20.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **45 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **27 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4 kg (57.6%)	85 %	7
Grain	Monachijski	2 kg (28.8%)	80 %	16
Grain	Caraaroma	0.6 kg (8.6%)	78 %	400
Grain	Weyermann - Carafa I	0.2 kg (2.9%)	70 %	690
Sugar	cukier	0.15 kg (2.2%)	100 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	English Golding	60 g	60 min	4.8 %
Boil	English Golding	30 g	20 min	4.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew T-58	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
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Spice	Imbir	30 g	Boil	60 min
Spice	Cynamon	5 g	Boil	10 min
Spice	Kardamon	5 g	Boil	10 min
Spice	Goździki	5 g	Boil	10 min
Spice	Gałka muszkatołowa	5 g	Boil	10 min
Finning	Mech irlandzki	2.5 g	Boil	15 min