

# X-mas ale

- Gravity **16.4 BLG**
- ABV ---
- IBU **39**
- SRM **44.8**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **23.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (76.9%)	90 %	7
Grain	Weyermann pszeniczny jasny	0.5 kg (7.7%)	86 %	6
Grain	Carabelge	0.25 kg (3.8%)	85 %	30
Grain	Abbey Malt	0.25 kg (3.8%)	85 %	45
Grain	Weyermann - Carafa II	0.25 kg (3.8%)	85 %	1150
Grain	Jęczmień palony	0.25 kg (3.8%)	60 %	1400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Southern Cross	20 g	60 min	12.8 %
Boil	Southern Cross	15 g	20 min	12.8 %
Boil	Southern Cross	15 g	10 min	12.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Spice	Kamis-przyprawa do piernika	60 g	Boil	10 min

## Notes

- blg 16,5  
po 10 dniach burzliwej 4blg  
Po 10 dniach cichej 4blg

Zabutkowane 10.12.16 z dodatkiem 110g glukozy  
Nov 19, 2016, 5:52 PM