

# Christmas ALE

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- Gravity **21.6 BLG**
- ABV **10.6 %**
- IBU **21.6**
- SRM **40**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **0 %**
- Size with trub loss **25 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.8 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

## Steps

- Temp **53 C**, Time **15 min**
- Temp **65 C**, Time **40 min**
- Temp **74 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **24 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **15 min** at **53C**
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **74C**
- Keep mash **10 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **31.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pale Ale Viking Malt	3.5 kg	80 %	15
Grain	Słód Pilzniejszy Viking Malt	2 kg	80 %	9
Grain	Słód Monachijski Jasny Viking Malt	1 kg	78 %	41
Grain	Palone Ziarno Jęczmienia Viking Malt	0.4 kg	71 %	2800
Grain	Słód Biscuit Castlemalting	0.2 kg	77 %	119
Grain	Słód Karmelowy 50EBC Viking Malt	0.1 kg	75 %	156
Grain	Słód Czekoladowy Ciemny Viking Malt	0.3 kg	67 %	3201
Grain	Słód Gryczany Castlemalting	0.5 kg	70 %	105
Adjunct	Płatki Owsiane	0.2 kg	75 %	7

## Hops

Use for	Name	Amount	Time	Alpha acid
	Iunga PL	25 g	60 min	11 %
	East Kent Goldings UK	25 g	10 min	6.3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis US-05			10 g	---

### Extras

Type	Name	Amount	Use for	Time
	Kolendra	1 g		---