

# AMBER ALE 11 blg cytrusowe

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **29**
- SRM **11.6**
- Style **American Amber Ale**

## Batch size

- Expected quantity of finished beer **34 liter(s)**
- Trub loss **5 %**
- Size with trub loss **35.7 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **39.3 liter(s)**

## Mash information

- Mash efficiency **88 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **28.2 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **22.2 liter(s)** of strike water to **67.7C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **23.1 liter(s)** of **76C** water or to achieve **39.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (66.6%)	80 %	5
Grain	Viking Munich Malt	0.5 kg (8.3%)	78 %	18
Grain	Viking Wheat Malt	0.5 kg (8.3%)	83 %	5
Grain	Viking Vienna Malt	0.5 kg (8.3%)	79 %	7
Grain	Special B Castle	0.167 kg (2.8%)	70 %	350
Grain	Caraaroma	0.34 kg (5.7%)	78 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Amarillo	27 g	40 min	9.5 %
Whirlpool	Columbus/Tomahawk/Zeus US	16 g	40 min	15.5 %
Whirlpool	Chinook	9 g	40 min	9 %
Whirlpool	Cascade PL	20 g	40 min	5.2 %
Whirlpool	Centennial	21 g	40 min	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	10 g	---
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### Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	5 g	Mash	70 min