

# Christmas American Stout

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **62**
- SRM **42.8**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **22.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **77C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód jęczmienny Pale Ale Zero Viking Malt	6 kg (74.1%)	72 %	6.5
Adjunct	Płatki owsiane	0.6 kg (7.4%)	72 %	---
Grain	Słód jęczmienny Dark Crystal	0.6 kg (7.4%)	72 %	300
Grain	Słód jęczmienny czekoladowy Viking Malt	0.6 kg (7.4%)	72 %	1200
Grain	Prażone ziarna jęczmienia Viking Malt	0.3 kg (3.7%)	72 %	1000

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	30 g	60 min	10 %
Boil	Cascade	45 g	60 min	7 %
Boil	Cascade	30 g	15 min	7 %
Boil	Citra	15 g	5 min	13 %
Boil	Cascade	15 g	5 min	7 %
Aroma (end of boil)	Citra	15 g	0 min	13 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis