

# Hazy American pale ale

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **55**
- SRM **4.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **15 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **64 C**, Time **20 min**
- Temp **68 C**, Time **20 min**
- Temp **70 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **20 min** at **68C**
- Keep mash **20 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **21.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Heidelberg	3 kg (60.1%)	80.5 %	3
Grain	Oats, Malted	1 kg (20%)	58 %	4
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Grain	Viking Wheat Malt	0.5 kg (10%)	83 %	5
Grain	Weyermann - Carapils	0.25 kg (5%)	78 %	4
Grain	Abbey Malt Weyermann	0.24 kg (4.8%)	75 %	45

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	5 g	60 min	13.3 %
Boil	Simcoe	5 g	60 min	12.7 %
Boil	Chinook	20 g	20 min	13.3 %
Boil	Simcoe	20 g	10 min	12.7 %
Aroma (end of boil)	Simcoe	20 g	5 min	12.7 %

Whirlpool	Simcoe	28 g	0 min	12.7 %
Whirlpool	Chinook	26 g	0 min	13.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
LalBrew Nottingham	Ale	Dry	11.5 g	Lallemand

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Chlorek wapnia	5 g	Boil	60 min
Water Agent	Epsom	1 g	Boil	60 min

## Notes

- 2,5ml kwasu do zac. + 2,5ml do wystła.

Temperatura fermentacji: 10-22°C optymalna ok. 17°C

start ~15

*Jun 5, 2024, 12:45 AM*