

# Hazy Apa M

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **22**
- SRM **4.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **52.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **35.4 liter(s)**
- Total mash volume **45.5 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **35.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **27.5 liter(s)** of **76C** water or to achieve **52.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	7.8 kg (77.2%)	80 %	5
Grain	Wheat, Flaked	0.6 kg (5.9%)	77 %	4
Grain	Oats, Flaked	0.8 kg (7.9%)	80 %	2
Grain	Briess - Rye Malt	0.6 kg (5.9%)	80 %	7
Grain	Strzegom Monachijski typ I	0.3 kg (3%)	79 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	20 g	5 min	11.3 %
Boil	Simcoe	15 g	15 min	11.3 %
Boil	Amarillo	20 g	5 min	9.9 %
Boil	Amarillo	15 g	15 min	9.9 %
Boil	Centennial	20 g	5 min	10.5 %
Boil	Centennial	15 g	15 min	10.5 %
Dry Hop	Simcoe	15 g	4 day(s)	11.3 %
Dry Hop	Amarillo	15 g	4 day(s)	9.5 %

Dry Hop	Cascade	100 g	4 day(s)	6 %
Boil	Amarillo	10 g	15 min	8.5 %
Boil	Wai-iti	10 g	15 min	2.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Verdant IPA	Ale	Dry	22 g	Lallemand
FM55 Zielone Wzgórze	Ale	Liquid	1000 ml	Fermentum Mobile