

# hazy apa - Planet Caravan

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **32**
- SRM **3.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **3 %**
- Size with trub loss **63.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **71.9 liter(s)**

## Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **39 liter(s)**
- Total mash volume **52 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **39 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **45.9 liter(s)** of **76C** water or to achieve **71.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilsner (2 Row) Ger	8 kg (61.5%)	81 %	4
Grain	Pszeniczny	2 kg (15.4%)	85 %	4
Grain	Słód owsiany Fawcett	1 kg (7.7%)	61 %	5
Grain	Płatki pszeniczne	1 kg (7.7%)	60 %	3
Grain	Płatki owsiane	1 kg (7.7%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Mandarina Bavaria	100 g	30 min	10 %
Whirlpool	lunga	100 g	30 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Verdant IPA	Ale	Dry	11.5 g	Lallemand