

# APA "CASC" KASK

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- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **83**
- SRM **4.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **18 %/h**
- Boil size **29.9 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

## Steps

- Temp **52 C**, Time **0 min**
- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **12.9 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **0 min** at **52C**
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **21.3 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3 kg (69.8%)	80 %	7
Grain	Karmelowy Jasny 30EBC	0.5 kg (11.6%)	75 %	30
Grain	Briess - Wheat Malt, White	0.5 kg (11.6%)	85 %	5
Grain	Briess - 2 Row Carapils Malt	0.3 kg (7%)	75 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Cascade PL	50 g	30 min	5.2 %
Whirlpool	Amarillo	50 g	30 min	9.5 %
Whirlpool	Simcoe	50 g	30 min	13.2 %
Whirlpool	Chinook	50 g	30 min	13 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	15 ml	Fermentum Mobile

## Notes

- Chmielenie na whirlpool rozpocząć po wyłączeniu palnika i uruchomieniu chłodnicy.  
*Oct 18, 2020, 12:24 AM*