

# 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*