

# American apacz

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- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **46**
- SRM **5.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33.7 liter(s)**
- Total mash volume **44.9 liter(s)**

## Steps

- Temp **50 C**, Time **30 min**
- Temp **67 C**, Time **40 min**
- Temp **71 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **33.7 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **40 min** at **67C**
- Keep mash **10 min** at **71C**
- Keep mash **10 min** at **78C**
- Sparge using **28.1 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.8 kg (33.9%) | 80 %  | 5   |
| Grain | Castle Pale Ale      | 7.2 kg (64.2%) | 80 %  | 8   |
| Grain | Karmelowy Czerwony   | 0.22 kg (2%)   | 75 %  | 59  |

## Hops

| Use for   | Name    | Amount | Time   | Alpha acid |
|-----------|---------|--------|--------|------------|
| Boil      | Mosaic  | 40 g   | 60 min | 12 %       |
| Boil      | Cascade | 10 g   | 20 min | 7 %        |
| Boil      | Mosaic  | 10 g   | 20 min | 12 %       |
| Boil      | Cascade | 5 g    | 5 min  | 7 %        |
| Boil      | Mosaic  | 20 g   | 5 min  | 12 %       |
| Boil      | Sladek  | 20 g   | 20 min | 6 %        |
| Boil      | Sladek  | 25 g   | 5 min  | 6 %        |
| Whirlpool | Cascade | 20 g   | 20 min | 6 %        |
| Whirlpool | Mosaic  | 30 g   | 20 min | 10 %       |