

# 1

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **52**
- SRM **6.4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount        | Yield | EBC |
|-------|---------------------------|---------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 5 kg (76.9%)  | 85 %  | 7   |
| Grain | Pszeniczny                | 1 kg (15.4%)  | 85 %  | 4   |
| Grain | Karmelowy Jasny 30EBC     | 0.5 kg (7.7%) | 75 %  | 30  |

## Hops

| Use for             | Name        | Amount | Time     | Alpha acid |
|---------------------|-------------|--------|----------|------------|
| Boil                | amora preta | 30 g   | 60 min   | 9 %        |
| Boil                | amora preta | 30 g   | 30 min   | 9 %        |
| Aroma (end of boil) | amora preta | 50 g   | 5 min    | 9 %        |
| Whirlpool           | amora preta | 30 g   | 0 min    | 9 %        |
| Dry Hop             | amora preta | 160 g  | 2 day(s) | 9 %        |