

# Sour summer pale ale

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **4.1**

## Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **5 %**
- Size with trub loss **39.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **45.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27.3 liter(s)**
- Total mash volume **36.4 liter(s)**

## Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **4 min**

## Mash step by step

- Heat up **27.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **4 min** at **76C**
- Sparge using **27.4 liter(s)** of **76C** water or to achieve **45.6 liter(s)** of wort

## Fermentables

| Type  | Name                  | Amount         | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt  | 7.5 kg (82.4%) | 80 %  | 5   |
| Grain | Weyermann - Carapils  | 1 kg (11%)     | 78 %  | 4   |
| Grain | Płatki owsiane        | 0.5 kg (5.5%)  | 60 %  | 3   |
| Grain | Karmelowy Jasny 30EBC | 0.1 kg (1.1%)  | 75 %  | 30  |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Marynka           | 30 g   | 60 min | 8.7 %      |
| Aroma (end of boil) | Marynka           | 20 g   | 10 min | 8.7 %      |
| Aroma (end of boil) | Lublin (Lubelski) | 50 g   | 10 min | 4 %        |
| Whirlpool           | Lublin (Lubelski) | 100 g  | 0 min  | 4 %        |
| Whirlpool           | Zula              | 50 g   | 0 min  | 8.3 %      |