

## Perfect blonde

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- Gravity **14 BLG**
- ABV ---
- IBU **56**
- SRM **5.3**
- Style **Blonde Ale**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **21 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

### Fermentables

| Type  | Name                              | Amount         | Yield | EBC |
|-------|-----------------------------------|----------------|-------|-----|
| Grain | Briess - Pale Ale Malt            | 4 kg (66.7%)   | 80 %  | 7   |
| Grain | Weyermann - Bohemian Pilsner Malt | 1.5 kg (25%)   | 81 %  | 4   |
| Grain | Briess - 2 Row Carapils Malt      | 0.25 kg (4.2%) | 75 %  | 3   |
| Grain | Munich malt                       | 0.25 kg (4.2%) | --- % | 14  |

### Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil                | Millennium | 35 g   | 60 min | 15.5 %     |
| Aroma (end of boil) | Millennium | 15 g   | 0 min  | 15.5 %     |

### Yeasts

| Name                 | Type  | Form | Amount | Laboratory     |
|----------------------|-------|------|--------|----------------|
| M54 california lager | Lager | Dry  | 10 g   | Mangrove jacks |