

# Light Lager - mandaryna

- Gravity **9.3 BLG**
- ABV **3.6 %**
- IBU **16**
- SRM **2.8**
- Style **Lite American Lager**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **16.7 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **75 C**, Time **5 min**

## Mash step by step

- Heat up **13 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **5 min** at **75C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt | 2.5 kg (67.6%) | 82 %  | 4   |
| Grain | Rice, Flaked        | 1.2 kg (32.4%) | 70 %  | 2   |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Mandarina Bavaria | 10 g   | 30 min | 7.8 %      |
| Aroma (end of boil) | Mandarina Bavaria | 20 g   | 5 min  | 7.8 %      |
| Whirlpool           | Mandarina Bavaria | 20 g   | 15 min | 7.8 %      |

## Yeasts

| Name                               | Type  | Form  | Amount | Laboratory      |
|------------------------------------|-------|-------|--------|-----------------|
| Mangrove Jack's M84 Bohemian Lager | Lager | Slant | 50 ml  | Mangrove Jack's |

## Extras

| Type  | Name                  | Amount | Use for | Time   |
|-------|-----------------------|--------|---------|--------|
| Spice | Pomelo zest whirlpool | 10 g   | Boil    | 15 min |