

# 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