

# india helles lager

---

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **33**
- SRM **5.3**
- Style **Premium American Lager**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **4 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **28.4 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **22.1 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **78C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **24.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (79.4%)	81 %	4
Grain	Monachijski	1 kg (15.9%)	80 %	16
Grain	Briess - Carapils Malt	0.3 kg (4.8%)	74 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum szyszki	20 g	60 min	10 %
Boil	Chinook	10 g	10 min	13 %
Boil	Simcoe	10 g	10 min	13.2 %
Boil	Mosaic	10 g	10 min	10 %
Boil	Simcoe	10 g	0 min	13.2 %
Boil	Chinook	10 g	0 min	13 %
Boil	Mosaic	10 g	0 min	10 %
Dry Hop	Simcoe	80 g	5 day(s)	13.2 %
Dry Hop	Chinook	80 g	5 day(s)	13 %
Dry Hop	Mosaic	80 g	5 day(s)	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Slant	100 ml	Mangrove Jack's

## Notes

- 10-12C 2 tygodnie fermentacji  
14C przez ostatnie 3 dni - redukcja di-acetylu  
następnie na cichą - 5 dni  
*Feb 28, 2018, 6:31 PM*