

## #38 Tropical Lager

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **24**
- SRM **4.7**
- Style **Classic American Pilsner**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **19.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **5 min** at **78C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (76.9%)	81 %	4
Grain	Strzegom Wiedeński	0.9 kg (13.8%)	79 %	10
Grain	Strzegom Monachijski typ I	0.6 kg (9.2%)	79 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Idaho Gem	5 g	60 min	13 %
Aroma (end of boil)	Idaho Gem	45 g	10 min	13 %
Dry Hop	Huell Melon	50 g	5 day(s)	7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-189	Lager	Dry	11.5 g	Fermentis