

## Colorado Pale laktoza

- Gravity **8.5 BLG**
- ABV **3.3 %**
- IBU **46**
- SRM **9.4**

### Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **20.2 liter(s)**

### Steps

- Temp **44 C**, Time **10 min**
- Temp **50 C**, Time **10 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **15.2 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **10 min** at **44C**
- Keep mash **10 min** at **50C**
- Keep mash **40 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **27.9 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	viking malt Colorado Pale Base	5 kg (98.8%)	80 %	15
Grain	Strzegom Barwiący	0.06 kg (1.2%)	68 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	60 min	15.5 %
Boil	Columbus/Tomahawk/Zeus	15 g	30 min	16.5 %
Boil	Cascade	15 g	30 min	6.5 %
Boil	Cascade	15 g	15 min	6.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
safale t-58	Ale	Dry	11.5 g	---

### Extras

Type	Name	Amount	Use for	Time
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Flavor	laktoza	250 g	Boil	60 min
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