

## 3A. Czech Pale Lager novalager

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **34**
- SRM **3.4**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **22.7 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.03 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **21.2 liter(s)**

### Steps

- Temp **66.5 C**, Time **60 min**

### Mash step by step

- Heat up **17 liter(s)** of strike water to **72.3C**
- Add grains
- Keep mash **60 min** at **66.5C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **22.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (95%)	80 %	4
Grain	Weyermann - Carapils	0.21 kg (5%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Premiant	20 g	60 min	8 %
Aroma (end of boil)	Saaz (Czech Republic)	50 g	15 min	4.5 %
Dry Hop	Saaz (Czech Republic)	50 g	3 day(s)	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
novalager	Lager	Dry	10 g	---

### Extras

Type	Name	Amount	Use for	Time
Water Agent	CaCl2	1 g	Boil	60 min
Water Agent	CaSO4	1 g	Boil	60 min