

## 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 |