

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 |