

Kumburak 13°

- Gravity **13.1 BLG**
- ABV ---
- IBU **37**
- SRM **6.3**
- Style **Bohemian Pilsener**

Batch size

- Expected quantity of finished beer **54 liter(s)**
- Trub loss **5 %**
- Size with trub loss **56.7 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **62.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **65 C**, Time **20 min**
- Temp **72 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **20 min** at **65C**
- Keep mash **50 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **46.9 liter(s)** of **76C** water or to achieve **62.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|---------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt | 6.5 kg (57%) | 82 % | 4 |
| Grain | Carahell | 0.5 kg (4.4%) | 77 % | 26 |
| Grain | Strzegom Wiedeński | 1 kg (8.8%) | 79 % | 10 |
| Liquid Extract | Bruntal | 3.4 kg (29.8%) | 81 % | 26 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------------------|--------|--------|------------|
| Boil | Magnum | 35 g | 60 min | 11.5 % |
| Boil | lunga | 35 g | 60 min | 11 % |
| Aroma (end of boil) | hallertau tradition | 20 g | 30 min | 6.3 % |
| Aroma (end of boil) | Hallertau Mittelfrüh | 20 g | 5 min | 3.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|-------|--------|--------|------------|
| FM31 Bawarska Dolina | Lager | Liquid | 30 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------|--------|---------|--------|
| Fining | Whirfloc T | 5 g | Boil | 10 min |