

Pils 2021

- Gravity **12.4 BLG**
- ABV ---
- IBU **37**
- SRM **4.5**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **7 %**
- Size with trub loss **22.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **12 %/h**
- Boil size **28.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **5.6 liter(s) / kg**
- Mash size **28 liter(s)**
- Total mash volume **33 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **28 liter(s)** of strike water to **67.9C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **5.5 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|------------|-------|-----|
| Grain | Strzegom Pilzneński | 4 kg (80%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 1 kg (20%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------------------|--------|--------|------------|
| Boil | lunga | 18 g | 50 min | 11 % |
| Boil | Magnum | 10 g | 40 min | 13.5 % |
| Aroma (end of boil) | Hallertau Tradition | 18 g | 15 min | 5.5 % |
| Aroma (end of boil) | Hallertau Tradition | 25 g | 1 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|-------|--------|--------|------------------|
| FM30 Bohemska rapsodia | Lager | Liquid | 30 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | Whirflock | 1.25 g | Boil | 15 min |