

## Felek 3

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **25**
- SRM **6.7**
- Style **Belgian Pale Ale**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **33.1 liter(s)**

### Mash information

- Mash efficiency **80.5 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **60 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount        | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński        | 4 kg (66.7%)  | 80 %  | 4   |
| Grain | Strzegom Monachijski typ I | 1.5 kg (25%)  | 79 %  | 16  |
| Grain | Biscuit Malt               | 0.3 kg (5%)   | 79 %  | 45  |
| Grain | Caramunich® typ I          | 0.2 kg (3.3%) | 73 %  | 80  |

### Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Marynka           | 28 g   | 45 min | 8.8 %      |
| Boil    | Lublin (Lubelski) | 28 g   | 15 min | 4 %        |

### Yeasts

| Name                    | Type | Form   | Amount | Laboratory       |
|-------------------------|------|--------|--------|------------------|
| FM26 Belgijskie Pagórki | Ale  | Liquid | 50 ml  | Fermentum Mobile |

### Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |                |     |      |        |
|--------|----------------|-----|------|--------|
| Fining | Mech Irlandzki | 5 g | Boil | 15 min |
|--------|----------------|-----|------|--------|