

Special Bitter

- Gravity **11.4 BLG**
- ABV ---
- IBU **32**
- SRM **7.5**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **33.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **22.8 liter(s)** of **76C** water or to achieve **33.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 3.5 kg (63.6%) | 79 % | 6 |
| Grain | Strzegom Monachijski typ I | 1.5 kg (27.3%) | 79 % | 16 |
| Grain | Strzegom Pszeniczny | 0.25 kg (4.5%) | 81 % | 6 |
| Grain | Strzegom Karmel 150 | 0.25 kg (4.5%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Bramling | 30 g | 60 min | 6 % |
| Boil | Fuggles | 30 g | 30 min | 4.5 % |
| Boil | Fuggles | 20 g | 15 min | 4.5 % |
| Boil | Fuggles | 10 g | 5 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|--------|---------|------------------|
| FM11 Wichrowe Wzgórza | Ale | Liquid | 1200 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 10 g | Boil | 15 min |