

Brunatna vienna

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **36**
- SRM **39.3**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **70 C**, Time **15 min**
- Temp **78 C**, Time **3 min**

Mash step by step

- Heat up **10.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **15 min** at **70C**
- Keep mash **3 min** at **78C**
- Sparge using **8.4 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Wiedeński | 2.5 kg (73.5%) | 79 % | 10 |
| Grain | Strzegom pszenica prażona | 0.2 kg (5.9%) | 70 % | 1000 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (5.9%) | 68 % | 1200 |
| Grain | Monachijski | 0.5 kg (14.7%) | 80 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Aroma (end of boil) | Lublin (Lubelski) | 30 g | 60 min | 4 % |
| Aroma (end of boil) | Puławski | 20 g | 20 min | 4.3 % |
| Boil | izabela | 10 g | 20 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 200 ml | Safale |