

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