

**bb**

- 
- Gravity **20 BLG**
  - ABV ---
  - IBU **35**
  - SRM **11.8**
  - Style **Doppelbock**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

### Steps

- Temp **72 C**, Time **60 min**

### Mash step by step

- Heat up **21 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **60 min** at **72C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	4 kg (57.1%)	80 %	15
Grain	Strzegom Wiedeński	3 kg (42.9%)	79 %	8

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Polaris	20 g	60 min	19.1 %