

## 9A. Doppelbock

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- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **20**
- SRM **15.2**
- Style **Doppelbock**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **21.2 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

### Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **20.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **21.2 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Wiedeński         | 4.5 kg (65.2%) | 79 %  | 10  |
| Grain | Strzegom Monachijski typ I | 2 kg (29%)     | 79 %  | 16  |
| Grain | Viking melanoidynowy       | 0.3 kg (4.3%)  | 75 %  | 60  |
| Grain | Carafa II                  | 0.1 kg (1.4%)  | 70 %  | 812 |

### Hops

| Use for | Name           | Amount | Time   | Alpha acid |
|---------|----------------|--------|--------|------------|
| Boil    | Nelson Sauvign | 18 g   | 60 min | 11 %       |

### Yeasts

| Name  | Type | Form  | Amount | Laboratory |
|-------|------|-------|--------|------------|
| Iutra | Ale  | Slant | 200 ml | ---        |