

## #076 Doppelbock

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- Gravity **18.9 BLG**
- ABV **8.2 %**
- IBU **24**
- SRM **20.4**
- Style **Doppelbock**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **8 %**
- Size with trub loss **19.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **25.9 liter(s)**

### Mash information

- Mash efficiency **71 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **28 liter(s)**
- Total mash volume **36 liter(s)**

### Steps

- Temp **52 C**, Time **20 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **10 min**
- Temp **100 C**, Time **20 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **28 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **20 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Keep mash **20 min** at **100C**
- Keep mash **10 min** at **720C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

### Fermentables

| Type  | Name   | Amount         | Yield | EBC  |
|-------|--|----------------|-------|------|
| Grain | Monachijski typ II<br>20-25 EBC<br>Weyermann | 6 kg (75%)     | 80 %  | 20   |
| Grain | Strzegom Pilzneński                          | 1.5 kg (18.8%) | 80 %  | 4    |
| Grain | Słód Caramunich<br>Typ II Weyermann          | 0.4 kg (5%)    | 73 %  | 120  |
| Grain | Carafa III                                   | 0.1 kg (1.3%)  | 70 %  | 1400 |

### Hops

| Use for | Name                 | Amount | Time   | Alpha acid |
|---------|----------------------|--------|--------|------------|
| Boil    | Magnum               | 15 g   | 60 min | 11.5 %     |
| Boil    | Hallertau Mittelfruh | 30 g   | 20 min | 3.8 %      |
| Boil    | Hallertau Mittelfruh | 20 g   | 10 min | 3.8 %      |

### Yeasts

| Name             | Type  | Form  | Amount  | Laboratory |
|------------------|-------|-------|---------|------------|
| Saflager W 34/70 | Lager | Slant | 1000 ml | Fermentis  |

### Extras

| Type   | Name                | Amount | Use for | Time   |
|--------|---------------------|--------|---------|--------|
| Fining | whirfloc T          | 1.25 g | Boil    | 10 min |
| Other  | pożywka dla drożdży | 10 g   | Boil    | 10 min |