

# Rauch doppelbock

- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **21**
- SRM **19.2**
- Style **Doppelbock**

## Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **52.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **57.8 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **47.4 liter(s)**
- Total mash volume **63.2 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **67 C**, Time **10 min**
- Temp **72 C**, Time **50 min**

## Mash step by step

- Heat up **47.4 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **10 min** at **67C**
- Keep mash **50 min** at **72C**
- Sparge using **26.2 liter(s)** of **76C** water or to achieve **57.8 liter(s)** of wort

## Fermentables

| Type  | Name                                      | Amount        | Yield  | EBC |
|-------|---|---------------|--------|-----|
| Grain | Pilzneński                                | 4 kg (25.3%)  | 81 %   | 4   |
| Grain | Monachijski                               | 3 kg (19%)    | 80 %   | 16  |
| Grain | Wędzony bukiem Viking Malt                | 5 kg (31.6%)  | 82 %   | 10  |
| Grain | Strzegom Pilzneński (wędzony na bączowce) | 1 kg (6.3%)   | 80 %   | 4   |
| Grain | Pale caramel                              | 0.5 kg (3.2%) | 78 %   | 400 |
| Grain | Special B Malt                            | 1 kg (6.3%)   | 65.2 % | 315 |
| Grain | Viking melanoidynowy                      | 0.5 kg (3.2%) | 75 %   | 60  |
| Grain | Biscuit Malt                              | 0.5 kg (3.2%) | 79 %   | 45  |
| Grain | Karmelowy Czerwony                        | 0.3 kg (1.9%) | 75 %   | 59  |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 50 g   | 60 min | 10 %       |
| Boil    | Marynka | 10 g   | 30 min | 10 %       |

## Yeasts

| Name   | Type | Form  | Amount | Laboratory     |
|--------|------|-------|--------|----------------|
| Gęstwa | Ale  | Slant | 500 ml | Browar Podgórz |