

# Doppelbock Heaven und Hell

- Gravity **19.8 BLG**
- ABV **8.7 %**
- IBU **22**
- SRM **18.4**
- Style **Doppelbock**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **19.9 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.1 liter(s)**
- Total mash volume **29.7 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **23.1 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **45 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **3.4 liter(s)** of **76C** water or to achieve **19.9 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Münchner Malz Best         | 2.5 kg (37.9%) | 78 %  | 20  |
| Grain | Wiener Malz Best           | 2 kg (30.3%)   | 80 %  | 8   |
| Grain | Pilsner Malz Best          | 1.5 kg (22.7%) | 81 %  | 3   |
| Grain | Chocolate Best             | 0.1 kg (1.5%)  | 75 %  | 900 |
| Grain | Caramunich 2 Best          | 0.2 kg (3%)    | 73 %  | 120 |
| Grain | Cara Amber                 | 0.2 kg (3%)    | 75 %  | 70  |
| Grain | BESTMALZ - Best Melanoidin | 0.1 kg (1.5%)  | 75 %  | 71  |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Perle             | 25 g   | 60 min | 7.3 %      |
| Boil    | Lublin (Lubelski) | 10 g   | 15 min | 3 %        |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                              |       |       |        |             |
|------------------------------|-------|-------|--------|-------------|
| Wyeast 2206 - Bavarian Lager | Lager | Slant | 600 ml | Wyeast Labs |
|------------------------------|-------|-------|--------|-------------|

### Extras

| Type   | Name    | Amount | Use for | Time   |
|--------|---------|--------|---------|--------|
| Fining | Biersol | 5 g    | Boil    | 10 min |