

# Ja...Ja.... Das wunder beer

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **23**
- SRM **8.1**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.6 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **18.2 liter(s)** of strike water to **74.3C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

## Fermentables

| Type  | Name                  | Amount        | Yield | EBC |
|-------|-----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt  | 2 kg (41.7%)  | 80 %  | 5   |
| Grain | Monachijski           | 1 kg (20.8%)  | 80 %  | 16  |
| Grain | Strzegom Wiedeński    | 1 kg (20.8%)  | 79 %  | 10  |
| Grain | Karmelowy Jasny 30EBC | 0.2 kg (4.2%) | 75 %  | 30  |
| Grain | red ale               | 0.3 kg (6.3%) | 70 %  | 80  |
| Grain | Pszeniczny            | 0.3 kg (6.3%) | 85 %  | 4   |

## Hops

| Use for             | Name                   | Amount | Time   | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil                | lunga                  | 10 g   | 60 min | 11 %       |
| Boil                | Hallertauer Mittelfruh | 10 g   | 10 min | 5 %        |
| Boil                | Tettnang               | 10 g   | 10 min | 5 %        |
| Aroma (end of boil) | Hallertauer Mittelfruh | 20 g   | 5 min  | 5 %        |
| Boil                | Tettnang               | 20 g   | 5 min  | 5 %        |

## Yeasts

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

|                  |       |     |      |           |
|------------------|-------|-----|------|-----------|
| Saflager W 34/70 | Lager | Dry | 22 g | Fermentis |
|------------------|-------|-----|------|-----------|

### Extras

| Type   | Name     | Amount | Use for | Time  |
|--------|----------|--------|---------|-------|
| Fining | Whirfloc | 1 g    | Boil    | 5 min |