

## #67 Mona(r)ch

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **45**
- SRM **8**
- Style **Munich Dunkel**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Steps

- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **72C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount        | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Monachijski                | 3 kg (54.5%)  | 80 %  | 16  |
| Grain | Pilzneński                 | 2 kg (36.4%)  | 81 %  | 4   |
| Grain | Caramel/Crystal Malt - 30L | 0.5 kg (9.1%) | 75 %  | 59  |

### Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Magnat  | 30 g   | 60 min | 13.2 %     |
| Aroma (end of boil) | Cascade | 28 g   | 10 min | 6 %        |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Fermentis  |