

# Marcowe

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **41**
- SRM **8**
- Style **Vienna Lager**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Pilzneński           | 2.5 kg (33.3%) | 81 %  | 4   |
| Grain | Monachijski          | 2.5 kg (33.3%) | 80 %  | 16  |
| Grain | Karmelowy Czerwony   | 1 kg (13.3%)   | 75 %  | 59  |
| Grain | Viking Pale Ale malt | 1 kg (13.3%)   | 80 %  | 5   |
| Grain | Płatki owsiane       | 0.5 kg (6.7%)  | 60 %  | 3   |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Hallertau Blanc   | 30 g   | 60 min | 11 %       |
| Boil    | Mandarina Bavaria | 15 g   | 60 min | 8 %        |
| Boil    | Izabella          | 20 g   | 60 min | 5.1 %      |
| Boil    | Hallertau Blanc   | 5 g    | 0 min  | 11 %       |
| Boil    | Mandarina Bavaria | 10 g   | 0 min  | 8 %        |
| Boil    | Izabella          | 10 g   | 0 min  | 5.1 %      |

## Yeasts

| Name             | Type  | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry  | 1 g    | Fermentis  |