

# prawie jak marcowe

- Gravity **12.4 BLG**
- ABV ---
- IBU **26**
- SRM **11.2**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **20.5 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **15 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15.9 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **15 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount          | Yield  | EBC |
|-------|----------------------|-----------------|--------|-----|
| Grain | Briess - Pilsen Malt | 1.2 kg (26.4%)  | 80.5 % | 2   |
| Grain | Monachijski          | 2.45 kg (53.8%) | 80 %   | 16  |
| Grain | Strzegom Karmel 150  | 0.5 kg (11%)    | 75 %   | 150 |
| Grain | Strzegom Wiedeński   | 0.4 kg (8.8%)   | 79 %   | 10  |

## Hops

| Use for | Name               | Amount | Time   | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil    | hallertauer taurus | 15 g   | 60 min | 14 %       |
| Boil    | Hallertau          | 10 g   | 5 min  | 4.5 %      |

## Yeasts

| Name                 | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale  | Dry  | 12 g   | Danstar    |