

# Powstaniec

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- Gravity **12.7 BLG**
- ABV ---
- IBU **13**
- SRM **10.5**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **29.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.3 liter(s)**

## Steps

- Temp **50 C**, Time **30 min**
- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **60 min** at **66C**
- Keep mash **2 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Wiedeński         | 2.8 kg (51.9%) | 79 %  | 10  |
| Grain | Strzegom Monachijski typ I | 2.4 kg (44.4%) | 79 %  | 16  |
| Grain | weyermann caramunch        | 0.2 kg (3.7%)  | 79 %  | 80  |

## Hops

| Use for | Name                | Amount | Time   | Alpha acid |
|---------|---------------------|--------|--------|------------|
| Boil    | Herbsbrucker selekt | 25 g   | 75 min | 3.4 %      |
| Boil    | Herbsbrucker selekt | 55 g   | 5 min  | 3.4 %      |

## Yeasts

| Name                 | Type  | Form   | Amount | Laboratory       |
|----------------------|-------|--------|--------|------------------|
| FM31 Bawarska Dolina | Lager | Liquid | 200 ml | Fermentum Mobile |