

# Podwójne

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **31**
- SRM **8.1**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **30.6 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **23.8 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński    | 3 kg (44.1%)   | 80 %  | 4   |
| Grain | Pale Malt (2 Row) US   | 1.5 kg (22.1%) | 79 %  | 4   |
| Grain | Pszeniczny             | 0.5 kg (7.4%)  | 85 %  | 4   |
| Grain | Briess - Carapils Malt | 0.5 kg (7.4%)  | 74 %  | 3   |
| Grain | Cara Gold              | 0.5 kg (7.4%)  | 75 %  | 120 |
| Grain | Płatki owsiane         | 0.5 kg (7.4%)  | 85 %  | 3   |
| Grain | Płatki orkiszowe       | 0.3 kg (4.4%)  | 80 %  | 4   |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Hallertau Blanc   | 20 g   | 60 min | 11 %       |
| Boil    | Premiant          | 20 g   | 30 min | 8 %        |
| Boil    | Lublin (Lubelski) | 40 g   | 0 min  | 4 %        |

## Yeasts

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

|        |       |       |        |    |
|--------|-------|-------|--------|----|
| w34/70 | Lager | Slant | 500 ml | mj |
|--------|-------|-------|--------|----|