

# 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
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w34/70	Lager	Slant	500 ml	mj
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