

# dojczye pils

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **27**
- SRM **3.5**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

- Temp **52 C**, Time **5 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **75.6 C**, Time **1 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **75.6C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.6 kg (89.3%)	80 %	4
Grain	Karamel Pils Steinbach	0.4 kg (7.8%)	79 %	6
Grain	słód zakwaszający	0.15 kg (2.9%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	50 g	30 min	5.5 %
Boil	Tettnang	25 g	20 min	4 %
Whirlpool	Tettnang	25 g	0 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
fm 31	Lager	Liquid	1000 ml	fermentum mobilie