

# Stout Małopolski

- Gravity **15.2 BLG**
- ABV ---
- IBU **46**
- SRM **40**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **23.9 liter(s)**
- Total mash volume **33.4 liter(s)**

## Steps

- Temp **65 C**, Time **75 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **23.9 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **75 min** at **65C**
- Keep mash **1 min** at **78C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	7.5 kg (78.5%)	79 %	6
Grain	Strzegom Karmel 300	1.25 kg (13.1%)	70 %	299
Grain	Strzegom Czekoladowy 1200	0.4 kg (4.2%)	68 %	1202
Grain	Jęczmień palony	0.4 kg (4.2%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	10 %
Boil	Marynka	35 g	20 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	65 g	0 min	4 %
Dry Hop	Lublin (Lubelski)	65 g	5 day(s)	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	30 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	10 min
Other	Płatki dębowe	50 g	Secondary	14 day(s)
Flavor	Cukier muscovado	300 g	Boil	20 min