

# 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    |