

# Stout 2020V1

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **25**
- SRM **28.3**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33.2 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **35.6 liter(s)**
- Total mash volume **43.5 liter(s)**

## Steps

- Temp **63 C**, Time **20 min**
- Temp **66 C**, Time **20 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **35.6 liter(s)** of strike water to **67.8C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **20 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **5.5 liter(s)** of **76C** water or to achieve **33.2 liter(s)** of wort

## Fermentables

| Type  | Name               | Amount        | Yield | EBC  |
|-------|--------------------|---------------|-------|------|
| Grain | Malteurop Pale Ale | 7 kg (88.6%)  | 79 %  | 6    |
| Grain | Strzegom Barwiący  | 0.5 kg (6.3%) | 68 %  | 1300 |
| Grain | Płatki owsiane     | 0.4 kg (5.1%) | 85 %  | 3    |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Magnum            | 20 g   | 60 min | 13.5 %     |
| Aroma (end of boil) | Lublin (Lubelski) | 50 g   | 5 min  | 4 %        |

## Yeasts

| Name        | Type | Form  | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Tormogarden | Ale  | Slant | 50 ml  | ---        |