

Stout 2020V1

- 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 | --- |