

## MS12 PT

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **36**
- SRM **28.5**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **34.2 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **22.2 liter(s)** of **76C** water or to achieve **34.2 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount        | Yield  | EBC  |
|-------|----------------------------|---------------|--------|------|
| Grain | Viking Pale Ale malt       | 5 kg (76.9%)  | 80 %   | 5    |
| Grain | Strzegom Czekoladowy jasny | 0.5 kg (7.7%) | 68 %   | 400  |
| Grain | Strzegom pszenica prażona  | 0.5 kg (7.7%) | 70 %   | 1000 |
| Sugar | Milk Sugar (Lactose)       | 0.5 kg (7.7%) | 76.1 % | 0    |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 50 g   | 45 min | 10 %       |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |