

MS13 Jaś

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **37**
- SRM **31.6**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **3 %**
- Size with trub loss **25.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **28.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

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

Mash step by step

- Heat up **21 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **28.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|---------------|--------|------|
| Grain | Viking Pale Ale malt | 5 kg (66.7%) | 80 % | 5 |
| Grain | Strzegom pszenica prażona | 0.5 kg (6.7%) | 70 % | 1000 |
| Grain | Caraaroma | 0.5 kg (6.7%) | 78 % | 400 |
| Grain | Pszeniczny | 1 kg (13.3%) | 85 % | 4 |
| Sugar | Milk Sugar (Lactose) | 0.5 kg (6.7%) | 76.1 % | 0 |

Hops

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

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 10.5 g | Safale |