

## Milk Stout (Pinta Project)

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **25**
- SRM **32.9**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.5 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.7 liter(s)**
- Total mash volume **11.6 liter(s)**

### Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **8.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

### Fermentables

| Type  | Name                             | Amount         | Yield  | EBC  |
|-------|----------------------------------|----------------|--------|------|
| Grain | Viking Pale Ale malt             | 2 kg (60.6%)   | 80 %   | 5    |
| Grain | Barley, Flaked                   | 0.4 kg (12.1%) | 70 %   | 4    |
| Grain | Jęczmień palony                  | 0.1 kg (3%)    | 55 %   | 1000 |
| Grain | Fawcett - Pale Chocolate         | 0.2 kg (6.1%)  | 71 %   | 600  |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.2 kg (6.1%)  | 73 %   | 1001 |
| Sugar | Milk Sugar (Lactose)             | 0.4 kg (12.1%) | 76.1 % | 0    |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Fuggles | 30 g   | 60 min | 5 %        |

### Yeasts

| Name                      | Type | Form   | Amount | Laboratory       |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Liquid | 6.6 ml | Fermentum Mobile |