

PMS Milk Stout

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **35**
- SRM **32.4**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **0 %**
- Size with trub loss **20 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **24.6 liter(s)**

Mash information

- Mash efficiency **81 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.8 liter(s)**
- Total mash volume **19.1 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14.8 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **24.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|--------|------|
| Grain | Strzegom Pale Ale | 3.1 kg (65.4%) | 79 % | 6 |
| Sugar | Milk Sugar (Lactose) | 0.5 kg (10.5%) | 76.1 % | 0 |
| Grain | Carafa I Special | 0.2 kg (4.2%) | 70 % | 664 |
| Grain | Płatki pszeniczne | 0.22 kg (4.6%) | 85 % | 3 |
| Grain | Płatki owsiane | 0.18 kg (3.8%) | 85 % | 3 |
| Grain | Caraaroma | 0.2 kg (4.2%) | 78 % | 400 |
| Grain | Jęczmień palony | 0.14 kg (3%) | 55 % | 985 |
| Grain | Carafa III | 0.2 kg (4.2%) | 70 % | 1034 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Magnum | 18 g | 60 min | 11.7 % |
| Boil | Fuggles | 30 g | 15 min | 6.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 150 ml | Fermentum Mobile |