

Milk Imperial Stout

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **48**
- SRM **40.6**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **25.8 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **26.6 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|--------|------|
| Grain | Strzegom Pale Ale | 5 kg (67.1%) | 79 % | 6 |
| Sugar | Milk Sugar (Lactose) | 0.8 kg (10.7%) | 76.1 % | 0 |
| Grain | Płatki owsiane | 0.4 kg (5.4%) | 85 % | 3 |
| Grain | Carahell | 0.2 kg (2.7%) | 77 % | 26 |
| Grain | Caraaroma | 0.2 kg (2.7%) | 78 % | 400 |
| Grain | Carafa I Special | 0.4 kg (5.4%) | 70 % | 664 |
| Grain | Carafa III | 0.3 kg (4%) | 70 % | 1034 |
| Grain | Jęczmień palony | 0.15 kg (2%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 15 g | 60 min | 15.5 % |
| Boil | Magnum | 25 g | 60 min | 12.9 % |

Yeasts

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