

MORIS

- Gravity **22.2 BLG**
- ABV **10 %**
- IBU **54**
- SRM **35.2**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **3 %**
- Size with trub loss **20.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **24.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **29.8 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **71 C**, Time **30 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **21.3 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **30 min** at **71C**
- Keep mash **10 min** at **75C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|-----------------|-------|------|
| Grain | Viking Pale Ale malt | 4.7 kg (55.2%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ II | 2.32 kg (27.2%) | 79 % | 22 |
| Grain | viking cookie | 0.5 kg (5.9%) | 80 % | 40 |
| Grain | Strzegom Czekoladowy jasny | 0.3 kg (3.5%) | 68 % | 400 |
| Grain | Karmelowy żytni Strzegom | 0.3 kg (3.5%) | 75 % | 150 |
| Grain | Black Barley (Roast Barley) | 0.1 kg (1.2%) | 55 % | 985 |
| Grain | Black (Patent) Malt | 0.1 kg (1.2%) | 55 % | 985 |
| Grain | Carafa III | 0.1 kg (1.2%) | 70 % | 1034 |
| Grain | Strzegom pszenica prażona | 0.1 kg (1.2%) | 70 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 30 g | 15 min | 4 % |
| Boil | Marynka | 60 g | 60 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |