

#16 RIS

- Gravity **31.2 BLG**
- ABV **15.7 %**
- IBU **70**
- SRM **84.9**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **120 min**
- Evaporation rate **15 %/h**
- Boil size **22.5 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **39 liter(s)**
- Total mash volume **52 liter(s)**

Steps

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

Mash step by step

- Heat up **39 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **-3.5 liter(s)** of **76C** water or to achieve **22.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Monachijski typ II | 5 kg (38.5%) | 79 % | 22 |
| Grain | Strzegom Monachijski typ I | 3 kg (23.1%) | 79 % | 16 |
| Grain | Strzegom Karmel 600 | 0.5 kg (3.8%) | 68 % | 601 |
| Grain | Żytni | 0.3 kg (2.3%) | 85 % | 8 |
| Grain | Karmelowy żytni Strzegom | 0.25 kg (1.9%) | 75 % | 150 |
| Grain | Cookie | 1 kg (7.7%) | 72 % | 40 |
| Grain | Pszeniczny | 0.5 kg (3.8%) | 85 % | 4 |
| Grain | Strzegom Czekoladowy jasny | 0.5 kg (3.8%) | 68 % | 400 |
| Grain | Strzegom Czekoladowy ciemny | 0.5 kg (3.8%) | 68 % | 1200 |
| Grain | Jęczmień palony | 0.65 kg (5%) | 55 % | 985 |
| Grain | Płatki owsiane | 0.8 kg (6.2%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | Magnum | 50 g | 60 min | 11.7 % |
| Boil | East Kent Goldings | 50 g | 60 min | 5.4 % |

| | | | | |
|------|-------------------|------|--------|-------|
| Boil | Marynka | 23 g | 40 min | 6.8 % |
| Boil | Lublin (Lubelski) | 15 g | 20 min | 2.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|-------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Slant | 180 ml | Fermentum Mobile |