

Ris źmija

- Gravity **27.7 BLG**
- ABV **13.3 %**
- IBU **98**
- SRM **62.8**
- 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 **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **37.5 liter(s)**
- Total mash volume **50 liter(s)**

Steps

- Temp **67 C**, Time **100 min**
- Temp **10 C**, Time **78 min**

Mash step by step

- Heat up **37.5 liter(s)** of strike water to **8.3C**
- Add grains
- Keep mash **78 min** at **10C**
- Keep mash **100 min** at **67C**
- Sparge using **1.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|---------------|-------|------|
| Grain | Viking Pale Ale malt | 10 kg (80%) | 80 % | 5 |
| Grain | Jęczmień palony | 0.5 kg (4%) | 55 % | 985 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.5 kg (4%) | 73 % | 1001 |
| Grain | Carafa III | 0.3 kg (2.4%) | 70 % | 1034 |
| Grain | Strzegom Karmel 150 | 0.4 kg (3.2%) | 75 % | 150 |
| Grain | Strzegom Karmel 300 | 0.4 kg (3.2%) | 70 % | 299 |
| Grain | Strzegom Karmel 600 | 0.4 kg (3.2%) | 68 % | 601 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Herkules | 100 g | 60 min | 17 % |