

Ris podwędzony

- Gravity **27.7 BLG**
- ABV **13.3 %**
- IBU **104**
- SRM **65.8**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **64 C**, Time **90 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **90 min** at **64C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|------------------------------------|----------------|-------|------|
| Grain | Grodziski pszeniczny wędzony dębem | 1 kg (8.8%) | 80 % | 3 |
| Grain | Viking Malt Wędzony Czereśnią | 1 kg (8.8%) | 82 % | 10 |
| Grain | Strzegom Czekoladowy jasny | 1 kg (8.8%) | 68 % | 400 |
| Grain | Viking Pale Ale malt | 3 kg (26.3%) | 80 % | 5 |
| Grain | Caraaroma | 1 kg (8.8%) | 78 % | 400 |
| Grain | Weyermann - Carafa III | 1 kg (8.8%) | 70 % | 1024 |
| Liquid Extract | WES ekstrakt słodowy jasny | 3.4 kg (29.8%) | 80 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 100 g | 60 min | 15.5 % |
| Aroma (end of boil) | Izabella | 100 g | 15 min | 5.1 % |
| Aroma (end of boil) | Izabella | 100 g | 5 min | 5.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|--------------|-----|-----|------|-----------|
| Safale US-05 | Ale | Dry | 23 g | Fermentis |
|--------------|-----|-----|------|-----------|