

RIS

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **98**
- SRM **30.5**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **29.9 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **65 C**, Time **90 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **90 min** at **65C**
- Keep mash **15 min** at **78C**
- Sparge using **18.9 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|----------------|-------|------|
| Grain | Słód Pilsner® 2,5-4,5 EBC Weyermann | 1.2 kg (21.8%) | 80 % | 4 |
| Grain | Monachijski typ II 20-25 EBC Weyermann | 1.2 kg (21.8%) | 80 % | 20 |
| Grain | Monachijski | 0.4 kg (7.3%) | 80 % | 16 |
| Grain | Strzegom Bursztynowy | 0.5 kg (9.1%) | 70 % | 49 |
| Grain | Strzegom Czekoladowy jasny | 0.4 kg (7.3%) | 68 % | 400 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (3.6%) | 68 % | 1200 |
| Grain | Strzegom pszenica prażona | 0.2 kg (3.6%) | 70 % | 1000 |
| Grain | Płatki pszeniczne | 0.4 kg (7.3%) | 85 % | 3 |
| Grain | Wędzony bukiem Viking Malt | 1 kg (18.2%) | 82 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 50 g | 60 min | 14.4 % |

| | | | | |
|-----------|----------|------|--------|-------|
| Whirlpool | Bramling | 20 g | 30 min | 7.5 % |
| Boil | Bramling | 30 g | 45 min | 7.5 % |
| Boil | epic | 25 g | 10 min | 5 % |
| Whirlpool | epic | 25 g | 30 min | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale | Dry | 23 g | Danstar |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------------|--------|-----------|-----------|
| Flavor | płatki dębowe | 50 g | Secondary | 21 day(s) |