

RIS"

- Gravity **23.1 BLG**
- ABV **10.5 %**
- IBU **87**
- SRM **41.2**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **13.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **15.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **18.4 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.3 liter(s)**
- Total mash volume **32.4 liter(s)**

Steps

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

Mash step by step

- Heat up **24.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **90 min** at **65C**
- Keep mash **15 min** at **78C**
- Sparge using **2.2 liter(s)** of **76C** water or to achieve **18.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 5 kg (61.7%) | 80 % | 5 |
| Grain | Strzegom Wiedeński | 0.4 kg (4.9%) | 79 % | 10 |
| Grain | Strzegom Bursztynowy | 0.5 kg (6.2%) | 70 % | 49 |
| Grain | Strzegom Czekoladowy jasny | 0.4 kg (4.9%) | 68 % | 400 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (2.5%) | 68 % | 1200 |
| Grain | Strzegom pszenica prażona | 0.2 kg (2.5%) | 70 % | 1000 |
| Grain | Płatki pszeniczne | 0.4 kg (4.9%) | 85 % | 3 |
| Grain | Wędzony bukiem Viking Malt | 1 kg (12.3%) | 82 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 50 g | 45 min | 16.8 % |
| Aroma (end of boil) | Centennial | 30 g | 0 min | 8.3 % |
| Aroma (end of boil) | Centennial | 20 g | 10 min | 8.3 % |
| Aroma (end of boil) | East Kent Goldings | 30 g | 0 min | 5.1 % |

| | | | | |
|---------------------|--------------------|------|--------|-------|
| Aroma (end of boil) | East Kent Goldings | 20 g | 10 min | 5.1 % |
|---------------------|--------------------|------|--------|-------|

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) |