

Rye Stout

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **71**
- SRM **34**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 3.2 kg (45.1%) | 80 % | 5 |
| Grain | Weyermann - Rye Malt | 1.5 kg (21.1%) | 85 % | 7 |
| Grain | Viking Munich Malt | 1 kg (14.1%) | 78 % | 18 |
| Grain | Weyermann - Carafa III | 0.2 kg (2.8%) | 70 % | 1024 |
| Grain | Weyermann - Chocolate Rye | 0.3 kg (4.2%) | 20 % | 493 |
| Grain | Weyermann - Chocolate Wheat | 0.2 kg (2.8%) | 74 % | 788 |
| Grain | Jęczmień palony | 0.2 kg (2.8%) | 55 % | 985 |
| Grain | Płatki owsiane | 0.5 kg (7%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 60 min | 15.5 % |
| Boil | Citra | 15 g | 30 min | 12 % |
| Boil | Simcoe | 15 g | 30 min | 13.2 % |
| Boil | Citra | 15 g | 15 min | 12 % |
| Boil | Simcoe | 15 g | 15 min | 13.2 % |
| Dry Hop | Simcoe | 30 g | 5 day(s) | 13.2 % |
| Dry Hop | Citra | 30 g | 5 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 23 g | Fermentis |