

Ryestout

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **29**
- SRM **36.2**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **15.5 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.9 liter(s)**
- Total mash volume **15.3 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **11.9 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **15.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|------|
| Grain | Pale Ale IREKS | 1.6 kg (47.1%) | 80 % | 8 |
| Grain | Żytni | 1 kg (29.4%) | 85 % | 8 |
| Grain | Brown Malt (British Chocolate) | 0.2 kg (5.9%) | 70 % | 128 |
| Grain | Aroma CastleMalting | 0.2 kg (5.9%) | 78 % | 100 |
| Grain | Pszeniczny Czekoladowy | 0.2 kg (5.9%) | 73 % | 1001 |
| Grain | Jęczmień palony | 0.1 kg (2.9%) | 55 % | 1000 |
| Grain | Weyermann - Carafa special I | 0.1 kg (2.9%) | 55 % | 900 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 8.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale | Dry | 7 g | Danstar |