

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	Pszoniczny 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