

Dry Stout (RISa)

- Gravity **35.5 BLG**
- ABV **18.8 %**
- IBU **79**
- SRM **45.8**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.82 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **29.8 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **60 min**

Mash step by step

- Heat up **22 liter(s)** of strike water to **57.7C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **60 min** at **78C**
- Sparge using **-1.5 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (64.1%)	80 %	5
Grain	Karmelowy Jasny 30EBC	0.2 kg (2.6%)	75 %	30
Grain	Strzegom Karmel 150	0.2 kg (2.6%)	75 %	150
Grain	Strzegom Czekoladowy ciemny	0.2 kg (2.6%)	68 %	1200
Grain	Jęczmień palony	0.2 kg (2.6%)	55 %	985
Grain	Strzegom Monachijski typ I	2 kg (25.6%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	60 g	60 min	13 %
Boil	Chinook	30 g	10 min	13 %
Dry Hop	Izabella	30 g	3 day(s)	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis