

Smoked Rye Imperial Stout

- Gravity **26.8 BLG**
- ABV **12.7 %**
- IBU **55**
- SRM **51.2**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **0 %**
- Size with trub loss **17 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **21.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.6 liter(s) / kg**
- Mash size **24.2 liter(s)**
- Total mash volume **33.5 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **24.2 liter(s)** of strike water to **61.7C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **60 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **21.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Best	4 kg (43%)	80 %	6
Grain	Rauch Malz Best	2 kg (21.5%)	77 %	6
Grain	Roggenmalz	1 kg (10.8%)	84 %	7
Grain	Caramunich II Best	0.6 kg (6.5%)	73 %	120
Grain	Special X Best	0.5 kg (5.4%)	75 %	350
Grain	Oats, Flaked	0.5 kg (5.4%)	80 %	2
Grain	Chocolate Best	0.2 kg (2.2%)	75 %	900
Grain	Carafa II Best	0.5 kg (5.4%)	65 %	1100

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northern Brewer	60 g	45 min	9.2 %
Boil	East Kent Goldings	20 g	45 min	5 %
Boil	Northern Brewer	20 g	15 min	9.2 %
Boil	Fuggles	20 g	15 min	2.4 %
Aroma (end of boil)	Fuggles	20 g	5 min	2.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 1056 American Ale	Ale	Liquid	400 ml	Wyeast Labs