

## American Rye Oats Stout #2

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **55**
- SRM **53.9**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **0 %**
- Size with trub loss **14.4 liter(s)**
- Boil time **30 min**
- Evaporation rate **12 %/h**
- Boil size **17.5 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

### Steps

- Temp **66 C**, Time **75 min**
- Temp **75 C**, Time **10 min**

### Mash step by step

- Heat up **10.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **75 min** at **66C**
- Keep mash **10 min** at **75C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **17.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	1.5 kg (42.9%)	74.84 %	13
Grain	Viking Rye Malt	1 kg (28.6%)	81 %	17
Grain	Oats, Flaked	0.5 kg (14.3%)	80 %	4
Grain	Chocolate Wheat (Weyermann)	0.25 kg (7.1%)	75.74 %	2180
Grain	Roasted Barley	0.15 kg (4.3%)	55 %	1576
Grain	Viking Caramel 600	0.1 kg (2.9%)	68 %	1600

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Green Bullet	15 g	30 min	12.2 %
Boil	Mosaic (HBC 369)	20 g	15 min	13.2 %
Boil	Ahtanum	25 g	10 min	6 %
Boil	Ahtanum	25 g	5 min	6 %

### Extras

Type	Name	Amount	Use for	Time
Water Agent	Chlorek Wapnia	8.9 g	Mash	60 min
Water Agent	Sól	3.66 g	Mash	60 min

Water Agent	Siarczan Magnezu (MgSO4)	1.83 g	Mash	60 min
Water Agent	Gips (Calcium Sulfate)	1.67 g	Mash	60 min
Water Agent	Kreda	1.61 g	Mash	60 min