

# american rye stout

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **39**
- SRM **30.4**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **34.2 liter(s)**
- Total mash volume **45.7 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **34.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **27.8 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	7 kg (61.3%)	80 %	5
Grain	Strzegom Monachijski typ II	1 kg (8.8%)	79 %	22
Grain	Rye Malt	1 kg (8.8%)	63 %	10
Grain	Viking Pilsner malt	0.37 kg (3.2%)	82 %	4
Grain	Strzegom Karmel 300	0.4 kg (3.5%)	70 %	299
Grain	Czekoladowy	0.545 kg (4.8%)	60 %	788
Grain	Carafa II	0.2 kg (1.8%)	70 %	812
Grain	Jęczmień palony	0.4 kg (3.5%)	55 %	985
Grain	Płatki owsiane	0.5 kg (4.4%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	35 g	60 min	10 %
Boil	Mosaic	30 g	20 min	10 %
Boil	Centennial	30 g	5 min	10.5 %
Aroma (end of boil)	Chinook	30 g	5 min	13 %
Aroma (end of boil)	Mosaic	30 g	5 min	10 %
Whirlpool	Amarillo	30 g	0 min	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	20 g	Fermentis