

AMERICAN RYE STOUT 15

- Gravity **13.8 BLG**
- ABV ---
- IBU **48**
- SRM **60.1**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2 kg (37.7%)	79 %	6
Grain	Żytni	2 kg (37.7%)	85 %	8
Grain	Caraaroma	0.1 kg (1.9%)	78 %	400
Grain	Strzegom Czekoladowy ciemny	0.3 kg (5.7%)	68 %	1200
Grain	Jęczmień palony	0.3 kg (5.7%)	55 %	985
Grain	Carafa III	0.2 kg (3.8%)	70 %	1034
Grain	Rye, Flaked	0.4 kg (7.5%)	78.3 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	10 g	60 min	13 %
Boil	Chinook	10 g	30 min	13 %
Boil	Chinook	20 g	10 min	13 %
Dry Hop	Chinook	30 g	4 day(s)	13 %
Boil	Amarillo	10 g	30 min	9.5 %
Boil	Amarillo	10 g	10 min	9.5 %
Whirlpool	Amarillo	20 g	0 min	9.5 %

Dry Hop	Amarillo	30 g	4 day(s)	9.5 %
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Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis