

# American Stout #29

- Gravity **15 BLG**
- ABV ---
- IBU **54**
- SRM **41.6**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **0 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **66 C**, Time **90 min**

## Mash step by step

- Heat up **19.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **90 min** at **66C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.4 kg (37.5%)	79 %	6
Grain	Monaegom Monachijski typ I	2.4 kg (37.5%)	79 %	16
Grain	Żytni	0.3 kg (4.7%)	85 %	8
Grain	Castle Cafe	0.2 kg (3.1%)	75.5 %	480
Grain	Strzegom Karmel 600	0.2 kg (3.1%)	68 %	601
Grain	Fawcett - Pale Chocolate	0.2 kg (3.1%)	71 %	600
Grain	Carafa II Special	0.2 kg (3.1%)	70 %	812
Grain	Bestmalz - Black Malt	0.2 kg (3.1%)	55 %	985
Grain	Chocolate Malt - Fawcawet	0.2 kg (3.1%)	73 %	887
Grain	Jęczmień palony	0.1 kg (1.6%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	18 g	60 min	16.8 %
Boil	Simcoe	15 g	15 min	13.3 %
Boil	Citra	15 g	15 min	14.2 %

Boil	Simcoe	15 g	5 min	13.3 %
Boil	Citra	15 g	5 min	14.2 %
Aroma (end of boil)	Simcoe	20 g	0 min	13.3 %
Aroma (end of boil)	Citra	20 g	0 min	14.2 %
Dry Hop	Simcoe	40 g	6 day(s)	14.2 %
Dry Hop	Citra	30 g	6 day(s)	14.2 %