

# Stout 1

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **42**
- SRM **26.6**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.7 liter(s)**
- Total mash volume **24.9 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **18.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **77C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **30.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.8 kg (44.9%)	79 %	6
Grain	Strzegom Karmel 150	0.13 kg (2.1%)	75 %	150
Grain	Carafa specjal TYP3	0.2 kg (3.2%)	70 %	900
Grain	Monachijski	0.5 kg (8%)	80 %	16
Grain	Pilzneński	2 kg (32.1%)	81 %	4
Grain	Weyermann Caramunich 3	0.2 kg (3.2%)	76 %	150
Grain	Carafa specjal TYP3	0.2 kg (3.2%)	70 %	1034
Grain	Caraaroma	0.2 kg (3.2%)	78 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka szyszki	50 g	60 min	5 %
Boil	Magnum	30 g	15 min	13.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	kawa	100 g	Boil	5 min
Flavor	płatki dębowe	20 g	Secondary	3 day(s)