

# Chocolate Stout

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- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **55**
- SRM **67.2**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.6 liter(s)**
- Total mash volume **32.8 liter(s)**

## Steps

- Temp **58 C**, Time **10 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **24.6 liter(s)** of strike water to **64.3C**
- Add grains
- Keep mash **10 min** at **58C**
- Keep mash **40 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4 kg (48.8%)	85 %	7
Grain	Biscuit Malt	1 kg (12.2%)	79 %	45
Grain	Strzegom Czekoladowy 1200	1 kg (12.2%)	68 %	1202
Grain	Weyermann Specjal W	0.2 kg (2.4%)	68 %	300
Grain	Strzegom Karmel 600	0.2 kg (2.4%)	68 %	601
Grain	Strzegom Czekoladowy jasny	0.2 kg (2.4%)	68 %	400
Grain	Weyermann - Carafa I	0.2 kg (2.4%)	70 %	690
Grain	Czekoladowy	0.2 kg (2.4%)	60 %	788
Grain	Melanoiden Malt	0.2 kg (2.4%)	80 %	39
Grain	Weyermann - Carafa III	0.2 kg (2.4%)	70 %	1024
Grain	Płatki owsiane	0.4 kg (4.9%)	85 %	3

Grain	Jęczmień niesłodowany	0.4 kg (4.9%)	75 %	2
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## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	50 min	15.5 %
Boil	Challenger	20 g	30 min	7 %
Aroma (end of boil)	Huell Melon	50 g	10 min	7.5 %
Aroma (end of boil)	Cluster	50 g	10 min	7.75 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP004 - Irish Ale Yeast	Ale	Liquid	125 ml	White Labs

## Extras

Type	Name	Amount	Use for	Time
Flavor	malina liofilizowana	50 g	Primary	5 day(s)
Flavor	żurawina liofilizowana	50 g	Primary	5 day(s)
Flavor	wiśnie mrożone	1600 g	Secondary	3 day(s)