

# Tosta Stout

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **32**
- SRM **35.5**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **65 min**
- Evaporation rate **9 %/h**
- Boil size **25 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **18.1 liter(s)**
- Total mash volume **23.7 liter(s)**

## Steps

- Temp **50 C**, Time **20 min**
- Temp **61 C**, Time **60 min**
- Temp **70 C**, Time **15 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **18.1 liter(s)** of strike water to **54.7C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **60 min** at **61C**
- Keep mash **15 min** at **70C**
- Keep mash **15 min** at **78C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **25 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4 kg (70.8%)	85 %	7
Grain	Barley, Flaked	1 kg (17.7%)	70 %	4
Grain	Palone ziarna jęczmienia Weyermann®	0.5 kg (8.8%)	55 %	1150
Grain	Weyermann - Carafa II	0.15 kg (2.7%)	70 %	837

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	20 g	60 min	5.5 %
Boil	Cascade	20 g	45 min	5.5 %
Boil	Fuggles	15 g	30 min	5 %
Aroma (end of boil)	Fuggles	15 g	15 min	5 %
Whirlpool	Cascade	10 g	0 min	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale