

# Tosta - clone O'Hara's Irish Stout

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **37**
- SRM **32.8**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **21.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.7 liter(s)**
- Total mash volume **27.9 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 **21.7 liter(s)** of strike water to **54.3C**
- 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 **11.7 liter(s)** of **76C** water or to achieve **27.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	4.5 kg (72.6%)	78 %	6
Grain	Płatki jęczmienne	1 kg (16.1%)	80 %	3
Grain	Jęczmień palony	0.57 kg (9.2%)	55 %	985
Grain	Chocolate Malt (UK)	0.13 kg (2.1%)	73 %	887

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	23 g	60 min	6 %
Boil	Cascade	23 g	45 min	6 %
Boil	East Kent Goldings	20 g	30 min	5.1 %
Aroma (end of boil)	East Kent Goldings	20 g	15 min	5.1 %
Aroma (end of boil)	Cascade	17 g	0 min	6 %

## Yeasts

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

## Notes

- Fermentacja 7dni 20st przelanie i 15 dni 20st  
*Mar 29, 2021, 10:42 AM*