

# 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*