

# Mleczna Tosia

- Gravity **15.4 BLG**
- ABV ---
- IBU **28**
- SRM **44.9**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **64 C**, Time **50 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **17.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **10 min** at **75C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4 kg (69.6%)	80 %	7
Grain	Pszeniczny	0.5 kg (8.7%)	85 %	4
Grain	Karmelowy jasny	0.5 kg (8.7%)	80 %	30
Grain	Strzegom Czekoladowy ciemny	0.25 kg (4.3%)	68 %	1200
Grain	Jęczmień palony	0.25 kg (4.3%)	55 %	985
Grain	Płatki owsiane	0.25 kg (4.3%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Phoenix	30 g	30 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	5.5 g	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	1000 g	Boil	10 min