

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 |