

# Milk Stout

- Gravity **12.1 BLG**
- ABV ---
- IBU **34**
- SRM **49.7**
- 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 **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **21 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **16.8 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC  |
|-------|-----------------------------|---------------|-------|------|
| Grain | Strzegom Pilzneński         | 2 kg (47.6%)  | 82 %  | 4    |
| Grain | Strzegom Monachijski typ II | 1 kg (23.8%)  | 80 %  | 22   |
| Grain | Kawowy                      | 0.2 kg (4.8%) | 78 %  | 500  |
| Grain | Strzegom Czekoladowy jasny  | 0.25 kg (6%)  | 70 %  | 400  |
| Grain | Strzegom Karmel 600         | 0.25 kg (6%)  | 70 %  | 601  |
| Grain | Strzegom Karmel 150         | 0.3 kg (7.1%) | 75 %  | 150  |
| Grain | Strzegom Barwiący           | 0.2 kg (4.8%) | 68 %  | 1300 |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 25 g   | 60 min | 11 %       |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 12 g   | Safale     |

## Extras

| Type  | Name    | Amount | Use for | Time   |
|-------|---------|--------|---------|--------|
| Other | Laktoza | 500 g  | Boil    | 10 min |

## Notes

- Burzliwa 20oC 9 dni,  
Cicha 20oC, 9 dni  
*Mar 23, 2016, 6:13 PM*