

# Milk Stout

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **29**
- SRM **41.8**
- Style **Oatmeal Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **29.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8 liter(s)**
- Total mash volume **10.3 liter(s)**

## Steps

- Temp **67 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **8 liter(s)** of strike water to **73.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **23.4 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

## Fermentables

| Type           | Name                              | Amount         | Yield | EBC |
|----------------|-----------------------------------|----------------|-------|-----|
| Grain          | Weyermann - Bohemian Pilsner Malt | 1.5 kg (26.3%) | 81 %  | 4   |
| Liquid Extract | Bruntal Pale Ale                  | 1.7 kg (29.8%) | 80 %  | 35  |
| Liquid Extract | ekstrakt słodowy ciemny Bruntal   | 1.7 kg (29.8%) | 90 %  | 621 |
| Grain          | Płatki owsiane                    | 0.8 kg (14%)   | 85 %  | 3   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 35 g   | 60 min | 10 %       |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 23 g   | fermentis  |

## Extras

| Type   | Name            | Amount | Use for   | Time     |
|--------|-----------------|--------|-----------|----------|
| Flavor | laktoza         | 500 g  | Boil      | 15 min   |
| Flavor | Wiórki kokosowe | 750 g  | Secondary | 7 day(s) |

|        |               |       |           |          |
|--------|---------------|-------|-----------|----------|
| Flavor | espresso      | 230 g | Secondary | 7 day(s) |
| Flavor | Laska wanilii | 5 g   | Secondary | 7 day(s) |

## Notes

- Płatki owsiane błyskawiczne prażone w piekarniku w 150°C, dwa dni przed zacieraniem.  
Wiórki kokosowe prażone na patelni przez 30 min na małym ogniu celem ekstrakcji tłuszczu.  
Laski wanilii 5 szt. podgrzane na patelni przed dodaniem na fermentację cichą.  
*Oct 16, 2020, 3:12 PM*