

## Milk Stout (MS)

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- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **30**
- SRM **33.7**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **17.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **13.4 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **10 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **17.1 liter(s)** of wort

### Fermentables

| Type    | Name                | Amount         | Yield | EBC |
|---------|---------------------|----------------|-------|-----|
| Grain   | Best malt           | 2.5 kg (65.8%) | 72 %  | 5   |
| Grain   | Strzegom Karmel 300 | 0.25 kg (6.6%) | 72 %  | 300 |
| Grain   | Strzegom Karmel 150 | 0.25 kg (6.6%) | 72 %  | 150 |
| Grain   | Czekoladowy 900     | 0.3 kg (7.9%)  | 72 %  | 900 |
| Grain   | Jęczmień palony     | 0.05 kg (1.3%) | 72 %  | 985 |
| Sugar   | Laktoza             | 0.3 kg (7.9%)  | 95 %  | 0   |
| Adjunct | Płatki owsiane      | 0.15 kg (3.9%) | 72 %  | --- |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Golding | 22 g   | 60 min | 3.1 %      |
| Boil    | Fuggles | 18 g   | 60 min | 6.6 %      |

### Yeasts

| Name                              | Type | Form    | Amount | Laboratory |
|-----------------------------------|------|---------|--------|------------|
| White Labs WLP007 Dry English Ale | Ale  | Culture | 50 g   | White Labs |

## Notes

- <https://www.brewersfriend.com/mash-chemistry-and-brewing-water-calculator/?id=JKF4YML>  
Jęczmień palony i sól czekoladowy dodane na ostatnie 15min etapu zacierania 67 stopni.  
*Sep 18, 2024, 1:17 PM*