

# Milk Stout centrum piwowarstwa

- Gravity **12.6 BLG**
- ABV ---
- IBU **36**
- SRM **59.7**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **36.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **44.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **31.8 liter(s)**

## Steps

- Temp **72 C**, Time **0 min**
- Temp **67 C**, Time **85 min**
- Temp **67 C**, Time **5 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **23.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **85 min** at **67C**
- Keep mash **5 min** at **67C**
- Keep mash **0 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **28.5 liter(s)** of **76C** water or to achieve **44.3 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount          | Yield  | EBC  |
|-------|-----------------------------|-----------------|--------|------|
| Grain | Strzegom Pilzneński         | 3.15 kg (39.7%) | 80 %   | 4    |
| Grain | Strzegom Monachijski typ II | 2.89 kg (36.4%) | 79 %   | 22   |
| Grain | Castle Cafe                 | 0.52 kg (6.5%)  | 75.5 % | 480  |
| Grain | Strzegom Karmel 600         | 0.52 kg (6.5%)  | 68 %   | 600  |
| Grain | Strzegom Czekoladowy ciemny | 0.35 kg (4.4%)  | 68 %   | 1200 |
| Grain | Jęczmień palony             | 0.52 kg (6.5%)  | 55 %   | 985  |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 52.5 g | 60 min | 10 %       |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 17.5 g | Safale     |

## Extras

| Type   | Name    | Amount | Use for | Time   |
|--------|---------|--------|---------|--------|
| Flavor | Laktoza | 875 g  | Boil    | 15 min |