

Milk Stout z łuską kakaowca

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **31**
- SRM **48.4**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **19.8 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **65 C**, Time **50 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **59.4C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **19.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|----------------------------------|----------------|--------|------|
| Grain | Weyermann - Pale Ale Malt | 1.2 kg (25.3%) | 85 % | 7 |
| Grain | Strzegom Monachijski typ II | 1 kg (21.1%) | 79 % | 22 |
| Adjunct | płatki jęcznienne | 0.4 kg (8.4%) | --- % | --- |
| Adjunct | płatki żytnie | 0.4 kg (8.4%) | --- % | --- |
| Grain | Caraaroma | 0.25 kg (5.3%) | 74 % | 400 |
| Grain | Weyermann - Carafa I | 0.3 kg (6.3%) | 70 % | 900 |
| Grain | Weyermann pszeniczny czekoladowy | 0.2 kg (4.2%) | 65 % | 1100 |
| Grain | Abbey Malt Weyermann | 0.5 kg (10.5%) | 75 % | 45 |
| Grain | Castle Cafe Castle malting | 0.5 kg (10.5%) | 75.5 % | 480 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 30 g | 60 min | 8.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 300 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|-----------|----------|
| Flavor | laktoza | 300 g | Boil | 10 min |
| Flavor | łuska kakaowca | 800 g | Secondary | 5 day(s) |