

Milk Stout

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **35**
- SRM **37.7**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **80 liter(s)**
- Trub loss **5 %**
- Size with trub loss **84 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **101.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **57 liter(s)**
- Total mash volume **76 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **57 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **63.2 liter(s)** of **76C** water or to achieve **101.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	7.5 kg (35.7%)	80 %	4
Grain	Strzegom Monachijski typ I	7.5 kg (35.7%)	79 %	16
Grain	Strzegom Czekoladowy jasny	0.8 kg (3.8%)	68 %	400
Grain	Strzegom Karmel 600	1 kg (4.8%)	68 %	601
Grain	Chocolate Malt (UK)	1 kg (4.8%)	73 %	1200
Grain	Carafa	1.2 kg (5.7%)	70 %	800
Sugar	Milk Sugar (Lactose)	2 kg (9.5%)	76.1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Progress	100 g	60 min	7.6 %
Boil	Magnum	50 g	45 min	12.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	33 g	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Other	laktoza	2000 g	Boil	10 min