

Milk Foreign Extra Stout

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **38**
- SRM **39.1**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **28.9 liter(s)**
- Total mash volume **36.7 liter(s)**

Steps

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

Mash step by step

- Heat up **28.9 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **10.6 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	6 kg (76.9%)	80 %	4
Grain	Jęczmień palony	0.3 kg (3.8%)	55 %	985
Grain	Carafa III	0.5 kg (6.4%)	70 %	1034
Grain	Strzegom Karmel 600	0.3 kg (3.8%)	68 %	601
Grain	Strzegom Karmel 150	0.3 kg (3.8%)	75 %	150
Grain	Strzegom Pszeniczny	0.4 kg (5.1%)	81 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	15.5 %
Boil	Columbus/Tomahawk/Zeus	20 g	20 min	15.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew US-05	Ale	Slant	166.67 ml	---

Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	0.83 g	Boil	1 min

Notes

- Klarstein XXL:
S1/67°C/3000W/1'
S2/67°C/1800W/60'
S3/78°C/2500W/1'
S4/78°C/1800W/9'
S5/Boil/3000W/1'
S6/Boil/1900W/60'
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