

# Milky FES

- Gravity **20.7 BLG**
- ABV ---
- IBU **73**
- SRM **42.3**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **6.3 liter(s)**
- Total mash volume **8.8 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **6.3 liter(s)** of strike water to **72.7C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	1 kg (27.4%)	79 %	6
Grain	Strzegom pszeniczny	0.5 kg (13.7%)	81 %	6
Grain	Strzegom Karmel 150	0.5 kg (13.7%)	75 %	150
Grain	Strzegom Czekoladowy jasny	0.5 kg (13.7%)	68 %	400
Sugar	Laktoza	0.25 kg (6.8%)	--- %	---
Adjunct	Płatki owsiane błyskawiczne	0.6 kg (16.4%)	--- %	---
Adjunct	Płatki pszenne błyskawiczne	0.3 kg (8.2%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga (PL)	15 g	45 min	10.8 %
Boil	lunga (PL)	15 g	30 min	10.8 %
Boil	lunga (PL)	30 g	15 min	10.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Mangrove Jack's M42 New World Strong Ale	Ale	Dry	5 g	---
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### Extras

Type	Name	Amount	Use for	Time
Spice	Laski wanilii	10 g	Boil	30 min
Spice	Ziarno kakaowca	100 g	Boil	30 min
Spice	Kawa z Etiopii	100 g	Secondary	14 day(s)