

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 |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|--|-----|-----|-----|-----|
| Mangrove Jack's M42 New World Strong Ale | Ale | Dry | 5 g | --- |
|--|-----|-----|-----|-----|

Extras

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