

# Kraina mlekiem i słodem płynąca

- Gravity **13.6 BLG**
- ABV ---
- IBU **15**
- SRM **47**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **70 C**, Time **50 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **50 min** at **70C**
- Keep mash **5 min** at **77C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield  | EBC  |
|-------|--------------------------------|----------------|--------|------|
| Grain | Strzegom Pale Ale              | 3 kg (62.5%)   | 79 %   | 6    |
| Grain | Strzegom<br>Czekoladowy ciemny | 0.5 kg (10.4%) | 68 %   | 1200 |
| Grain | Strzegom Karmel 30             | 0.5 kg (10.4%) | 75 %   | 30   |
| Sugar | Milk Sugar (Lactose)           | 0.8 kg (16.7%) | 76.1 % | 0    |

## Hops

| Use for | Name               | Amount | Time   | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil    | East Kent Goldings | 10 g   | 20 min | 5.1 %      |
| Boil    | East Kent Goldings | 10 g   | 45 min | 5.1 %      |
| Boil    | East Kent Goldings | 10 g   | 60 min | 5.1 %      |

## Yeasts

| Name                         | Type | Form   | Amount | Laboratory       |
|------------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie<br>Ciemności | Ale  | Liquid | 30 ml  | Fermentum Mobile |