

# 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 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 Ciemności	Ale	Liquid	30 ml	Fermentum Mobile