

# Surpro

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **40**
- SRM **4.1**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (83.3%)	80 %	4
Grain	Płatki owsiane	0.5 kg (8.3%)	85 %	3
Grain	Płatki pszeniczne	0.5 kg (8.3%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	10 g	30 min	10 %
Boil	Nelson Sauvín	10 g	30 min	11 %
Whirlpool	Mosaic	30 g	30 min	10 %
Whirlpool	Nelson Sauvín	30 g	30 min	11 %
Dry Hop	Mosaic	10 g	7 day(s)	10 %
Dry Hop	Nelson Sauvín	10 g	7 day(s)	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	11.5 g	Danstar