

# RIS 2020

- Gravity **23.8 BLG**
- ABV **10.9 %**
- IBU **73**
- SRM **54**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **37.5 liter(s)**
- Total mash volume **50 liter(s)**

## Steps

- Temp **70 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **37.5 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **60 min** at **70C**
- Keep mash **10 min** at **78C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	PaleAle	8 kg (64%)	80 %	5
Grain	Pilznenski	2 kg (16%)	80 %	9
Grain	Pszeniczny	0.5 kg (4%)	80 %	5
Grain	Kawowy 500	0.5 kg (4%)	80 %	500
Grain	Czekoladowy 900	1 kg (8%)	80 %	900
Grain	Barwiący	0.5 kg (4%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	60 g	60 min	14 %
Boil	mistral	50 g	30 min	8 %
Boil	mistral	50 g	10 min	8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us05	Ale	Slant	200 ml	---