

# Król lata

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **40**
- SRM **3**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **12.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.1 liter(s) / kg**
- Mash size **6.2 liter(s)**
- Total mash volume **8.2 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **6.2 liter(s)** of strike water to **71.1C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **12.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1 kg (50%)	81 %	4
Grain	Płatki pszeniczne	0.8 kg (40%)	85 %	3
Grain	Viking Wheat Malt	0.2 kg (10%)	83 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	6 g	60 min	15.3 %
Boil	Citra	6 g	30 min	14.1 %
Aroma (end of boil)	Citra	10 g	1 min	14.1 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	10 g	1 min	15.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	11 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
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Spice	Kolendra	4 g	Boil	5 min
Spice	Curacao	13 g	Boil	5 min