

# Krasostawskie Chmielaki 2020

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **33**
- SRM **3.5**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **34.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **22.5 liter(s)** of **76C** water or to achieve **34.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	6 kg (100%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	20 min	10 %
Boil	Marynka	30 g	15 min	10 %
Boil	Marynka	30 g	5 min	10 %
Aroma (end of boil)	Marynka	30 g	0 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Slant	200 ml	Fermentis