

# chmielowa podstawa

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **41**
- SRM **4.4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **55 C**, Time **5 min**
- Temp **65 C**, Time **40 min**
- Temp **68 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (60%)	80 %	5
Grain	Pszeniczny	1 kg (20%)	85 %	4
Grain	Rice, Flaked	0.8 kg (16%)	70 %	2
Grain	Płatki owsiane	0.2 kg (4%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	38 g	40 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
lalbrew kolsch	Ale	Dry	11 g	Lallemand

## Extras

Type	Name	Amount	Use for	Time
Spice	witamina C	2 g	Primary	7 day(s)

## Notes

- Na 10 min przed końcem dodałem 120 ml starej gęstwy drożdżowej dla zwiększenia FAN. 5 min przed 2g Wit c. Na tlenione blenderem. Do fermentora dodałem trochę osadu z gotowania. Piwo klarowne jasne.  
*Mar 28, 2022, 8:19 PM*