

# Bigos

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **28**
- SRM **14.6**
- Style **Specialty Beer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

## Steps

- Temp **68 C**, Time **90 min**

## Mash step by step

- Heat up **17.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.7 kg (62.7%)	80 %	5
Grain	Monachijski	0.6 kg (10.2%)	80 %	16
Grain	Strzegom Karmel 150	1.1 kg (18.6%)	75 %	150
Grain	Pszeniczny	0.5 kg (8.5%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Dry Hop	Columbus/Tomahawk/Zeus	10 g	60 day(s)	15.5 %
Boil	Columbus/Tomahawk/Zeus	40 g	5 min	15.5 %
Boil	Coś	50 g	5 min	14 %
Boil	Nelson Sauvín	5 g	5 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	12 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Spice	Skórka bergamotki	10 g	Boil	20 min