

# Special Bitter

- Gravity **11.4 BLG**
- ABV ---
- IBU **32**
- SRM **7.5**
- Style **Special/Best/Premium Bitter**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **33.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **22.8 liter(s)** of **76C** water or to achieve **33.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.5 kg (63.6%)	79 %	6
Grain	Strzegom Monachijski typ I	1.5 kg (27.3%)	79 %	16
Grain	Strzegom Pszeniczny	0.25 kg (4.5%)	81 %	6
Grain	Strzegom Karmel 150	0.25 kg (4.5%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bramling	30 g	60 min	6 %
Boil	Fuggles	30 g	30 min	4.5 %
Boil	Fuggles	20 g	15 min	4.5 %
Boil	Fuggles	10 g	5 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM11 Wichrowe Wzgórza	Ale	Liquid	1200 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	10 g	Boil	15 min