

# Szyszki z górnych gałęzi

- Gravity **18.9 BLG**
- ABV **8.2 %**
- IBU **50**
- SRM **8**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **68 C**, Time **20 min**
- Temp **72 C**, Time **15 min**
- Temp **82 C**, Time **5 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **20 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **82C**
- Sparge using **3.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	3 kg (66.7%)	78 %	6
Grain	Monachijski	1 kg (22.2%)	80 %	16
Grain	Pszeniczny	0.5 kg (11.1%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	30 g	50 min	5.1 %
Boil	Amarillo	15 g	20 min	9.5 %
Aroma (end of boil)	Mosaic	30 g	5 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11.5 g	---

## Extras

Type	Name	Amount	Use for	Time
Spice	Szyszki Sosny	100 g	Mash	60 min