

# Spokojny górniak z hopzoil

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **40**
- SRM **4.4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **2 %**
- Size with trub loss **20.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.9 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 **65 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **24.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (90.9%)	80 %	5
Grain	Płatki owsiane	0.5 kg (9.1%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	31 g	60 min	10 %
Aroma (end of boil)	Chinook	15 g	10 min	6.2 %
Aroma (end of boil)	Cascade PL	15 g	10 min	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa - Pure Ale Yeast 7	Ale	Dry	10 g	Gozdawa

## Extras

Type	Name	Amount	Use for	Time
Spice	hopzoil	1 g	Secondary	3 day(s)