

# Grodziska IPA

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **59**
- SRM **4.2**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **4 %**
- Size with trub loss **13 liter(s)**
- Boil time **75 min**
- Evaporation rate **20 %/h**
- Boil size **16.6 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **14.6 liter(s)**

## Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **11.4 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **8.5 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Grodziski	2 kg (61.5%)	80 %	4
Grain	Viking Pale Ale malt	1.2 kg (36.9%)	80 %	5
Grain	Weyermann - Acidulated Malt	0.05 kg (1.5%)	80 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	11 g	60 min	11 %
Boil	Chinook PL	14 g	60 min	9.1 %
Boil	Oktawia	25 g	15 min	7.1 %
Aroma (end of boil)	Oktawia	25 g	0 min	7.1 %
Dry Hop	Oktawia	50 g	3 day(s)	7.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Safale

## Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	2 g	Mash	60 min
Other	Łuska gryczana	100 g	Mash	10 min