

# 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 |