

# Hazy PA - Izabella

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **52**
- SRM **3.9**
- Style **American Pale Ale**

## 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 **3.4 liter(s) / kg**
- Mash size **9.1 liter(s)**
- Total mash volume **11.8 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **9.1 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **76C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount          | Yield  | EBC |
|-------|----------------------|-----------------|--------|-----|
| Grain | Strzegom Pilzniejszy | 1 kg (37.4%)    | 80 %   | 4   |
| Grain | Viking Pale Ale malt | 1 kg (37.4%)    | 80 %   | 5   |
| Grain | Oats, Flaked         | 0.5 kg (18.7%)  | 80 %   | 2   |
| Grain | Carahell             | 0.125 kg (4.7%) | 77 %   | 26  |
| Grain | Acid Malt            | 0.05 kg (1.9%)  | 58.7 % | 6   |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Summit   | 15 g   | 60 min   | 14.3 %     |
| Boil                | Izabella | 20 g   | 15 min   | 5.1 %      |
| Aroma (end of boil) | Izabella | 20 g   | 0 min    | 5.1 %      |
| Dry Hop             | Izabella | 60 g   | 3 day(s) | 5.1 %      |

## Yeasts

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

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|             |                 |     |          |        |
|-------------|-----------------|-----|----------|--------|
| Water Agent | gips piwowarski | 2 g | Boil     | 60 min |
| Water Agent | Witamina C      | 2 g | Bottling | ---    |