

# Pacyficzna przygoda Janusza i Grażyny

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **32**
- SRM **4.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **14 %/h**
- Boil size **27.4 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **20.6 liter(s)**

## Steps

- Temp **66 C**, Time **70 min**

## Mash step by step

- Heat up **15.5 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **70 min** at **66C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **27.4 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (97.1%)   | 80 %  | 5   |
| Grain | Karmelowy Czerwony   | 0.15 kg (2.9%) | 75 %  | 59  |

## Hops

| Use for             | Name              | Amount | Time     | Alpha acid |
|---------------------|-------------------|--------|----------|------------|
| Boil                | Marynka           | 20 g   | 50 min   | 10 %       |
| Aroma (end of boil) | Rakau (NZ)        | 20 g   | 15 min   | 9.5 %      |
| Aroma (end of boil) | Lublin (Lubelski) | 20 g   | 15 min   | 4 %        |
| Dry Hop             | Zula              | 30 g   | 2 day(s) | 7.3 %      |
| Dry Hop             | Lublin (Lubelski) | 30 g   | 2 day(s) | 4 %        |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | ---        |