

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 | --- |