

## PACIFIC RYE IPA #28

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- Gravity **15.2 BLG**
- ABV ---
- IBU **73**
- SRM **10.2**
- Style **Rye IPA**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

### Mash information

- Mash efficiency **74.3 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **28.4 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **77 C**, Time **5 min**

### Mash step by step

- Heat up **22.4 liter(s)** of strike water to **72.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount         | Yield  | EBC |
|-------|------------------------|----------------|--------|-----|
| Grain | Bestmalz - pilzneński  | 4 kg (66.1%)   | 80.5 % | 4   |
| Grain | Viking - Rye Malt      | 1.1 kg (18.2%) | 81 %   | 8   |
| Grain | Chateau - Crystal      | 0.3 kg (5%)    | 78 %   | 150 |
| Grain | Bestmalz - Carmel Pils | 0.2 kg (3.3%)  | 75 %   | 5   |
| Grain | Bruntal - pszeniczny   | 0.2 kg (3.3%)  | 83 %   | 5   |
| Grain | Bruntal - pale ale     | 0.25 kg (4.1%) | 79 %   | 6.5 |

### Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil                | Chinook    | 5 g    | 60 min | 12.4 %     |
| Boil                | Rakau (NZ) | 30 g   | 20 min | 10.7 %     |
| Boil                | Centennial | 20 g   | 20 min | 8.9 %      |
| Boil                | Galaxy     | 10 g   | 20 min | 14.5 %     |
| Aroma (end of boil) | Rakau (NZ) | 40 g   | 7 min  | 10.7 %     |
| Aroma (end of boil) | Centennial | 20 g   | 7 min  | 8.5 %      |
| Aroma (end of boil) | Chinook    | 15 g   | 7 min  | 12.4 %     |

|                     |            |      |          |        |
|---------------------|------------|------|----------|--------|
| Aroma (end of boil) | Centennial | 10 g | 7 min    | 8.9 %  |
| Aroma (end of boil) | Galaxy     | 10 g | 7 min    | 14.5 % |
| Dry Hop             | Centennial | 20 g | 4 day(s) | 8.5 %  |
| Dry Hop             | Rakau (NZ) | 30 g | 4 day(s) | 10.5 % |
| Dry Hop             | Mosaic     | 20 g | 4 day(s) | 11.7 % |
| Dry Hop             | Galaxy     | 15 g | 4 day(s) | 14.5 % |

## Yeasts

| Name                 | Type | Form  | Amount | Laboratory |
|----------------------|------|-------|--------|------------|
| Danstar - Nottingham | Ale  | Slant | 150 ml | ---        |

## Extras

| Type        | Name             | Amount | Use for | Time   |
|-------------|------------------|--------|---------|--------|
| Fining      | Mech irlandzki   | 3 g    | Boil    | 7 min  |
| Water Agent | gips piwowarski  | 7 g    | Mash    | ---    |
| Other       | fosforan diamonu | 3 g    | Boil    | 30 min |