

# Polish PA VERMELHO Single Hop

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- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **29**
- SRM **3.7**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.6 liter(s)**
- Total mash volume **8.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **6.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **77C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 2 kg (90.9%)  | 80 %  | 5   |
| Grain | viking carabody      | 0.2 kg (9.1%) | 80 %  | 8   |

## Hops

| Use for   | Name     | Amount | Time     | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil      | VERMELHO | 5 g    | 40 min   | 9.1 %      |
| Whirlpool | VERMELHO | 40 g   | 15 min   | 9.1 %      |
| Dry Hop   | VERMELHO | 55 g   | 3 day(s) | 9.1 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |