

# Admiral Single Hop

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **50**
- SRM **6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **33.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **25.5 liter(s)**

## Steps

- Temp **65 C**, Time **70 min**

## Mash step by step

- Heat up **19.1 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **33.3 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield  | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | Briess - Vienna Malt        | 5 kg (78.4%)   | 77.5 % | 7   |
| Grain | Briess - Pilsen Malt        | 0.5 kg (7.8%)  | 80.5 % | 3   |
| Grain | Pszeniczny                  | 0.5 kg (7.8%)  | 85 %   | 4   |
| Grain | Weyermann - Melanoiden Malt | 0.2 kg (3.1%)  | 81 %   | 53  |
| Grain | Simpsons - Crystal Rye      | 0.08 kg (1.3%) | 73 %   | 177 |
| Grain | Płatki owsiane              | 0.1 kg (1.6%)  | 85 %   | 3   |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Admiral | 20 g   | 60 min | 14.3 %     |
| Boil                | Admiral | 20 g   | 20 min | 14.3 %     |
| Aroma (end of boil) | Admiral | 20 g   | 5 min  | 14.3 %     |
| Whirlpool           | Admiral | 15 g   | 20 min | 14.3 %     |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 150 ml | ---        |

## Extras

| Type   | Name       | Amount | Use for | Time   |
|--------|------------|--------|---------|--------|
| Fining | Irish Moss | 5 g    | Boil    | 15 min |

### Notes

- Woda: Ribes z Simply+gips+epsom+PH  
*Dec 13, 2017, 10:33 PM*