

# Donald

- Gravity **17.1 BLG**
- ABV ---
- IBU **93**
- SRM **6.7**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **0 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (61.5%)  | 80 %  | 5   |
| Grain | Strzegom Karmel 30   | 1 kg (15.4%)  | 75 %  | 30  |
| Grain | Pszeniczny           | 1 kg (15.4%)  | 85 %  | 4   |
| Grain | Weyermann - Carapils | 0.5 kg (7.7%) | 78 %  | 4   |

## Hops

| Use for | Name    | Amount | Time     | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil    | Chinook | 30 g   | 60 min   | 12.8 %     |
| Boil    | Chinnok | 20 g   | 30 min   | 12.8 %     |
| Boil    | Simcoe  | 20 g   | 30 min   | 13.2 %     |
| Boil    | Cascade | 20 g   | 30 min   | 6.8 %      |
| Boil    | Simcoe  | 30 g   | 5 min    | 13.2 %     |
| Boil    | Cascade | 30 g   | 5 min    | 6.8 %      |
| Dry Hop | Simcoe  | 50 g   | 7 day(s) | 13.2 %     |
| Dry Hop | Cascade | 50 g   | 7 day(s) | 6.8 %      |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|              |     |     |        |           |
|--------------|-----|-----|--------|-----------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |
|--------------|-----|-----|--------|-----------|

### Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 2 g    | Boil    | 15 min |