

# Darth Vader Dark Cascadian Ale

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **44**
- SRM **31.7**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **34.6 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.6 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **18.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **23.4 liter(s)** of **76C** water or to achieve **34.6 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount          | Yield | EBC  |
|-------|---------------------|-----------------|-------|------|
| Grain | Strzegom Pale Ale   | 5.95 kg (81.6%) | 79 %  | 6    |
| Grain | Strzegom Karmel 150 | 0.3 kg (4.1%)   | 75 %  | 150  |
| Grain | Biscuit Malt        | 0.14 kg (1.9%)  | 79 %  | 45   |
| Grain | Carafa II           | 0.6 kg (8.2%)   | 70 %  | 1150 |
| Sugar | Brown Sugar, Light  | 0.3 kg (4.1%)   | 100 % | 16   |

## Hops

| Use for             | Name    | Amount  | Time   | Alpha acid |
|---------------------|---------|---------|--------|------------|
| Boil                | Simcoe  | 35.71 g | 60 min | 8 %        |
| Boil                | Cascade | 29.76 g | 45 min | 6 %        |
| Boil                | Fuggles | 35.71 g | 15 min | 4.5 %      |
| Aroma (end of boil) | Cascade | 29.76 g | 0 min  | 6 %        |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 23 g   | Fermentis  |