

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 |