

# Cascadian Dark Ale - BLACK IPA USA 11-01-2020 15l

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **56**
- SRM **47.9**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **28.8 liter(s)**

## Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **55 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **21.6 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **55 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

## Fermentables

| Type  | Name                  | Amount          | Yield | EBC  |
|-------|-----------------------|-----------------|-------|------|
| Grain | Strzegom Pale Ale     | 5 kg (69.4%)    | 79 %  | 6    |
| Grain | Słód Monachijski Typ2 | 1 kg (13.9%)    | 79 %  | 15   |
| Grain | Carafa III            | 0.5 kg (6.9%)   | 65 %  | 1400 |
| Grain | Słód Czekoladowy      | 0.42 kg (5.8%)  | 68 %  | 1200 |
| Grain | Biscuit Malt          | 0.284 kg (3.9%) | 79 %  | 45   |

## Hops

| Use for   | Name                   | Amount | Time   | Alpha acid |
|-----------|------------------------|--------|--------|------------|
| Boil      | Columbus/Tomahawk/Zeus | 20 g   | 60 min | 12.5 %     |
| Boil      | Columbus/Tomahawk/Zeus | 10 g   | 30 min | 12.5 %     |
| Boil      | Simcoe                 | 30 g   | 20 min | 13.2 %     |
| Boil      | Lemon drop             | 10 g   | 10 min | 4.6 %      |
| Boil      | Lemon drop             | 40 g   | 5 min  | 4.6 %      |
| Boil      | Ahtanum                | 40 g   | 5 min  | 3.4 %      |
| Whirlpool | Amarillo USA           | 50 g   | 0 min  | 8.8 %      |
| Whirlpool | Lemon drop             | 50 g   | 0 min  | 4.6 %      |

|         |          |      |          |       |
|---------|----------|------|----------|-------|
| Dry Hop | Amarillo | 50 g | 4 day(s) | 9.5 % |
|---------|----------|------|----------|-------|

### Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale  | Dry  | 22 g   | ---        |

### Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | Mech Irlandzki | 7.99 g | Boil    | 10 min |