

# klon Black Hope

- Gravity **13.6 BLG**
- ABV ---
- IBU **51**
- SRM **25.3**
- Style **American Brown Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.1 liter(s)**

## Steps

- Temp **68 C**, Time **666 min**

## Mash step by step

- Heat up **16.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **666 min** at **68C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC  |
|-------|--------------------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński            | 3.1 kg (66.2%) | 80 %  | 4    |
| Grain | Strzegom Karmel 150            | 0.5 kg (10.7%) | 75 %  | 150  |
| Grain | Brown Malt (British Chocolate) | 0.5 kg (10.7%) | 70 %  | 128  |
| Grain | Weyermann - Melanoiden Malt    | 0.4 kg (8.5%)  | 81 %  | 53   |
| Grain | Weyermann - Carapils           | 0.1 kg (2.1%)  | 78 %  | 4    |
| Grain | Strzegom Czekoladowy 1200      | 0.08 kg (1.7%) | 68 %  | 1202 |

## Hops

| Use for | Name       | Amount | Time     | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil    | Cascade    | 25 g   | 60 min   | 8.6 %      |
| Boil    | Centennial | 12 g   | 60 min   | 11.1 %     |
| Boil    | Vic Secret | 5 g    | 10 min   | 13.5 %     |
| Boil    | Centennial | 10 g   | 10 min   | 11.1 %     |
| Boil    | Cascade    | 10 g   | 10 min   | 8.6 %      |
| Boil    | Vic Secret | 15 g   | 2 min    | 13.5 %     |
| Dry Hop | Vic Secret | 20 g   | 3 day(s) | 13.5 %     |

|         |         |      |          |       |
|---------|---------|------|----------|-------|
| Dry Hop | Cascade | 20 g | 3 day(s) | 8.6 % |
|---------|---------|------|----------|-------|

## Yeasts

| Name  | Type | Form  | Amount | Laboratory |
|-------|------|-------|--------|------------|
| us-05 | Ale  | Slant | 666 ml | fermentis  |