

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 |