

Double Black IPA

- Gravity **18.7 BLG**
- ABV **8.1 %**
- IBU **58**
- SRM **27.6**
- Style **Black IPA**

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 **80 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **28.9 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21.1 liter(s)** of strike water to **75.7C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (64.1%) | 80 % | 5 |
| Grain | Malteurop Lager (stary) | 1 kg (12.8%) | 80 % | 5 |
| Grain | Strzegom Czekoladowy jasny (stary) | 0.25 kg (3.2%) | 68 % | 400 |
| Grain | Caraaroma (stary) | 0.25 kg (3.2%) | 78 % | 400 |
| Grain | Płatki owsiane | 1 kg (12.8%) | 60 % | 3 |
| Grain | Barwiący (stary) | 0.3 kg (3.8%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil | Iunga | 25 g | 60 min | 12.2 % |
| Boil | Galaxy | 25 g | 10 min | 16.7 % |
| Whirlpool | Amarillo | 25 g | 15 min | 9.9 % |
| Whirlpool | Mosaic | 25 g | 15 min | 12.8 % |
| Whirlpool | Galaxy | 25 g | 15 min | 16.7 % |
| Dry Hop | Amarillo | 25 g | 2 day(s) | 9.9 % |
| Dry Hop | Mosaic | 25 g | 2 day(s) | 12.8 % |

| | | | | |
|---------|--------|------|----------|--------|
| Dry Hop | Galaxy | 50 g | 2 day(s) | 16.7 % |
|---------|--------|------|----------|--------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------------|------|-------|--------|------------|
| Lallemand - LalBrew Verdant IPA | Ale | Slant | 150 ml | Lallemand |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|-------|
| Fining | Whirlfloc | 0.5 g | Boil | 5 min |