

Imperial Black IPA

- Gravity **18 BLG**
- ABV ---
- IBU **120**
- SRM **62**
- Style **Imperial IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **18.5 liter(s)**
- Total mash volume **25.3 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|-----------------|-------|------|
| Grain | Briess - Pale Ale Malt | 5.75 kg (83.9%) | 80 % | 7 |
| Grain | Strzegom Czekoladowy 400 | 0.5 kg (7.3%) | 68 % | 400 |
| Grain | Briess - Chocolate Malt | 0.35 kg (5.1%) | 60 % | 1200 |
| Grain | Black (Patent) Malt | 0.25 kg (3.6%) | 55 % | 1350 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Bravo | 30 g | 60 min | 15.5 % |
| Boil | Dr Rudi | 20 g | 50 min | 11.8 % |
| Aroma (end of boil) | DR Rudi | 30 g | 20 min | 11.5 % |
| Aroma (end of boil) | Cascade | 33 g | 15 min | 6 % |
| Aroma (end of boil) | Eureka | 20 g | 15 min | 18 % |
| Aroma (end of boil) | Cascade | 33 g | 10 min | 6 % |
| Aroma (end of boil) | Eureka | 10 g | 10 min | 18 % |
| Aroma (end of boil) | Cascade | 33 g | 1 min | 6 % |
| Aroma (end of boil) | Eureka | 20 g | 1 min | 18 % |
| Dry Hop | Eureka | 100 g | 3 day(s) | 18 % |
| Dry Hop | Dr Rudi | 30 g | 3 day(s) | 11.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale | Dry | 10 g | Mangrove Jack's |