

FOREST BLACK IPA

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **57**
- SRM **34.9**
- Style **Black 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 **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński | 5 kg (66.7%) | 80 % | 4 |
| Grain | Carafa III | 0.7 kg (9.3%) | 70 % | 1034 |
| Grain | Słód owsiany Fawcett | 0.5 kg (6.7%) | 61 % | 5 |
| Grain | Płatki pszeniczne | 0.5 kg (6.7%) | 60 % | 3 |
| Grain | Pszeniczny | 0.8 kg (10.7%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------|--------|----------|------------|
| Boil | Chinook pl | 40 g | 60 min | 6.2 % |
| Boil | Magnum | 16 g | 60 min | 10 % |
| Boil | Pacific Gem | 20 g | 30 min | 12.6 % |
| Boil | Chinook | 15 g | 15 min | 10.7 % |
| Aroma (end of boil) | Simcoe | 20 g | 0 min | 11.3 % |
| Aroma (end of boil) | Pacific Gem | 20 g | 0 min | 15.3 % |
| Aroma (end of boil) | Chinook | 10 g | 0 min | 13 % |
| Dry Hop | Pacific Gem | 60 g | 5 day(s) | 15.3 % |
| Dry Hop | Chinook | 40 g | 5 day(s) | 13 % |
| Dry Hop | Simcoe | 30 g | 5 day(s) | 11.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale | Dry | 11 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|-------|-------------|------|------|-------|
| Spice | pȩdy sosny | 50 g | Boil | 5 min |
|-------|-------------|------|------|-------|