

Natkowy Stout v2

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **39**
- SRM **37.1**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **4 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **70 C**, Time **5 min**
- Temp **77 C**, Time **5 min**
- Temp **100 C**, Time **45 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **5 min** at **70C**
- Keep mash **5 min** at **77C**
- Keep mash **45 min** at **100C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|------------|-------|-----|
| Grain | Weyermann Specjal W | 1 kg (20%) | 68 % | 300 |
| Grain | Abbey Malt Weyermann | 2 kg (40%) | 75 % | 45 |
| Grain | Caraaroma | 1 kg (20%) | 78 % | 400 |
| Grain | Weyermann - Pale Ale Malt | 1 kg (20%) | 85 % | 7 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|----------|------------|
| Boil | Oktawia | 30 g | 45 min | 8.3 % |
| Boil | Sybilla | 15 g | 45 min | 6.2 % |
| Aroma (end of boil) | Sybilla | 15 g | 15 min | 6.2 % |
| Dry Hop | Falconer's Flight | 15 g | 7 day(s) | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-----------------------------------|-----|-----|------|-----------------|
| Mangrove Jack's M15 Empire Ale | Ale | Dry | 11 g | Mangrove Jack's |
|-----------------------------------|-----|-----|------|-----------------|