

# Ned Stark

- Gravity **25.9 BLG**
- ABV **12.2 %**
- IBU **61**
- SRM **48.7**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **23.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.2 liter(s) / kg**
- Mash size **20.9 liter(s)**
- Total mash volume **30.4 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **73 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **20.9 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **30 min** at **73C**
- Keep mash **10 min** at **76C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **23.3 liter(s)** of wort

## Fermentables

| Type  | Name                          | Amount        | Yield | EBC  |
|-------|-------------------------------|---------------|-------|------|
| Grain | Weyermann - Light Munich Malt | 2 kg (21.1%)  | 82 %  | 14   |
| Grain | Weyermann - Pale Ale Malt     | 3 kg (31.6%)  | 85 %  | 7    |
| Grain | Weyermann - Carabelge         | 1 kg (10.5%)  | 80 %  | 30   |
| Grain | Weyermann - Carafa II         | 0.5 kg (5.3%) | 70 %  | 837  |
| Grain | Simpsons - Roasted Barley     | 0.5 kg (5.3%) | 70 %  | 1084 |
| Grain | Weyermann - Pale Wheat Malt   | 2 kg (21.1%)  | 85 %  | 5    |
| Grain | Oats, Flaked                  | 0.5 kg (5.3%) | 80 %  | 2    |

## Hops

| Use for | Name            | Amount | Time   | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil    | Ella (AUS)      | 30 g   | 60 min | 14.6 %     |
| Boil    | Ella (AUS)      | 20 g   | 30 min | 14.6 %     |
| Boil    | Northern Brewer | 50 g   | 15 min | 7.7 %      |

## Yeasts

| Name                                     | Type | Form | Amount | Laboratory      |
|------------------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M42 New World Strong Ale | Ale  | Dry  | 10 g   | Mangrove Jack's |

## Extras

| Type   | Name           | Amount | Use for   | Time     |
|--------|----------------|--------|-----------|----------|
| Flavor | Sliwki suszone | 50 g   | Boil      | 15 min   |
| Flavor | Daktyl         | 120 g  | Boil      | 15 min   |
| Other  | Kawa           | 200 g  | Secondary | 4 day(s) |

## Notes

- Kawa 200 gramow. Aromatyczna etiopska + robusta po 50%.  
*Sep 18, 2017, 12:27 AM*