

# 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*