

# 1 - Nawinie

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **37**
- SRM **8**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (33.3%)	80 %	5
Grain	Strzegom Pilzneński	2 kg (33.3%)	80 %	4
Grain	Viking melanoidynowy	1 kg (16.7%)	75 %	60
Grain	Strzegom Monachijski typ I	1 kg (16.7%)	79 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	60 min	12.1 %
Boil	Marynka	25 g	10 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	25 g	0 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar

## Extras

Type	Name	Amount	Use for	Time
Fining	mech	6 g	Boil	10 min