

# Zachód północy

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **24**
- SRM **15.3**
- Style **Northern English Brown Ale**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **15.8 liter(s)**

## Steps

- Temp **50 C**, Time **15 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **15 min**

## Mash step by step

- Heat up **12.3 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **15 min** at **50C**
- Keep mash **40 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **15 min** at **77C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **19.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (51.3%)	80 %	5
Grain	Biscuit Malt	0.5 kg (12.8%)	79 %	45
Grain	Cara Gold Castlemalting	1 kg (25.6%)	78 %	120
Liquid Extract	Miód Gryczany (Buckwheat Honey)	0.4 kg (10.3%)	70 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Sovereign	30 g	30 min	6.1 %
Aroma (end of boil)	Enigma (AUS)	5 g	10 min	17.2 %
Dry Hop	Enigma (AUS)	25 g	6 day(s)	17.2 %

## Yeasts

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