

# Grudziądz kiedy mocne

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **25**
- SRM **3.4**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.1 liter(s)**
- Total mash volume **10.8 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.7 kg (43.6%)	80 %	5
Grain	Słód Cookie biling malt	0.5 kg (12.8%)	--- %	---
Grain	Strzegom Pszeniczny	0.5 kg (12.8%)	81 %	6
Sugar	Cukier	1.2 kg (30.8%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Mandarina Bavaria	10 g	10 min	10 %
Boil	Mandarina Bavaria	10 g	45 min	10 %
Aroma (end of boil)	Mandarina Bavaria	7 g	10 min	8.5 %
Boil	Marynka	9 g	20 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Whisky	Lager	Dry	11 g	---