

## #29 Grodziskie ala APA

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **25**
- SRM **9.8**
- Style **Grodziskie/Graetzer**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Liquid Extract	Bruntal ekstrakt słodowy Pale Ale	3.4 kg (88.2%)	80 %	35
Grain	Pilzneński	0.125 kg (3.2%)	81 %	4
Grain	Smoked Malt	0.33 kg (8.6%)	80 %	18

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	11.8 %
Boil	Cascade PL	5 g	20 min	7.9 %
Boil	Tomyski	5 g	20 min	4.9 %
Boil	Eliksir	5 g	20 min	5 %
Boil	Cascade PL	10 g	3 min	7.9 %
Boil	Tomyski	10 g	3 min	4.9 %
Boil	Eliksir	10 g	3 min	5 %
Dry Hop	Cascade PL	25 g	3 day(s)	7.9 %
Dry Hop	Tomyski	25 g	3 day(s)	4.9 %
Dry Hop	Eliksir	25 g	3 day(s)	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	50 ml	wlasne