

## #36 APA na rozgrzewkę

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **45**
- SRM **3.3**

### Batch size

- Expected quantity of finished beer **36 liter(s)**
- Trub loss **5 %**
- Size with trub loss **39.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **47.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **28 liter(s)**
- Total mash volume **36 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	8 kg (100%)	81 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Simcoe	50 g	15 min	13.2 %
Aroma (end of boil)	Mosaic	50 g	15 min	10 %
Aroma (end of boil)	Cascade	50 g	15 min	6 %
Whirlpool	Cascade	50 g	0 min	6 %
Whirlpool	Simcoe	50 g	0 min	13.2 %
hop stand 75 stopni				
Whirlpool	Mosaic	50 g	0 min	10 %
hop stand 75 stopni				

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis