

ciemny chmielony lager

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **36**
- SRM **25.2**
- Style **Munich Dunkel**

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 **72 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **18 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	0.65 kg (21.7%)	79 %	16
Grain	Strzegom Monachijski typ II	0.55 kg (18.3%)	79 %	22
Grain	Pilzneński	1 kg (33.3%)	81 %	4
Grain	BESTMALZ - Best Melanoidin	0.15 kg (5%)	75 %	71
Grain	Aroma CastleMalting	0.1 kg (3.3%)	78 %	100
Grain	Briess - Dark Chocolate Malt	0.05 kg (1.7%)	60 %	999
Grain	Briess - Midnight Wheat Malt	0.1 kg (3.3%)	55 %	1084
Grain	Fawcett - Pale Chocolate	0.1 kg (3.3%)	71 %	600
Grain	Żytni	0.3 kg (10%)	85 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Izabella	30 g	50 min	5.1 %
Boil	Fuggles	10 g	30 min	4.5 %
Boil	Styrian Golding	20 g	5 min	2.6 %
Dry Hop	Zula	10 g	3 day(s)	8.3 %
Dry Hop	Styrian Golding	20 g	3 day(s)	3.6 %