

9# graff

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **12**
- SRM **4.6**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **23.1 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|----------------------------|-----------------|-------|-----|
| Liquid Extract | WES ekstrakt słodowy jasny | 1.7 kg (55.7%) | 80 % | 20 |
| Sugar | sok jabłkowy | 1 kg (32.8%) | 100 % | --- |
| Sugar | cukier | 0.35 kg (11.5%) | 100 % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Cascade PL | 25 g | 10 min | 5.5 % |
| Boil | Warrior | 5 g | 25 min | 15.5 % |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------|--------|---------|--------|
| Flavor | laktoza | 700 g | Boil | 10 min |
| Flavor | cynamon | 3 g | Boil | 5 min |