Theoretical Final Molasses % Cane

Final molasses expected per tonne of cane from the non-sugars in clear juice and the brix and pol of final molasses, and the pol it carries.

Method: Sugar factory chemical control (daily manufacturing report) definitions; as compiled in SugarProcessTech; ...

Input parameters

Unit system: SI

Parameter	Value	Unit
Non-sugars in clear juice % cane	2.3500	%
Brix % final molasses	88.000	%
Pol % final molasses	32.000	%

Calculated results

Parameter	Value	Unit
Non-sugars % final molasses	56.000	%
Final molasses % cane	4.1964	%
Pol lost in final molasses % cane	1.3429	%

Notes for this case

- Assumes every non-sugar in clear juice ends in final molasses.

Formula and method

$$FM_c = \frac{NS_{CJ,c}}{Bx_{FM} - Pol_{FM}}, \quad Pol_{FM,c} = FM_c \, Pol_{FM}$$

Variables

$NS_{CJ,c}$	Non-sugars in clear juice % cane	-
Bx_{FM}	Brix % final molasses	-
Pol_{FM}	Pol % final molasses	-
NS_{FM}	Non-sugars % final molasses	-
FM_c	Final molasses % cane	-
$Pol_{FM,c}$	Pol lost in final molasses % cane	-

Method and standards

Non-sugar balance.

Assumptions and limits

- Non-sugars conserved.

References

- Sugar factory chemical control (daily manufacturing report) definitions
- as compiled in SugarProcessTech
- Formulas for calculating sugar industry DMR

Report details

Report reference	FCC-8RPV-0SC4 (the same inputs always give the same reference)
Generated	17 November 2026, 19:46 UTC
Calculator	Theoretical Final Molasses % Cane
Method last reviewed	13 November 2026
Software release	FireCAD Calc, release of 17 November 2026
Release checks	2 reference cases of this calculator, computed independently, are checked on every release

Results are for engineering estimation. Verify critical designs against the referenced standards and your own data.

This calculator online

https://calc.firecad.com/sugar-ethanol/chemical-control/theoretical-final-molasses

Open this case on calc.firecad.com →

Reopens the calculator with the inputs of this report.