

Driven to deliver.

Whatever
your DTO
needs are,
Ingevity has
you covered.

As a manufacturer of DTO, Ingevity has access to refineries on three continents which provides security of supply along with quality products. We offer a comprehensive DTO product portfolio.

Distilled tall oil

Distilled tall oil (DTO) is a sustainable material made from a renewable resource—the pine tree. It is comprised of rosin acids and fatty acids with typical rosin acid ranges of 15–50%, depending on application. It's commonly used as a co-emulsifier in soluble oil and semi-synthetic metalworking formulations.

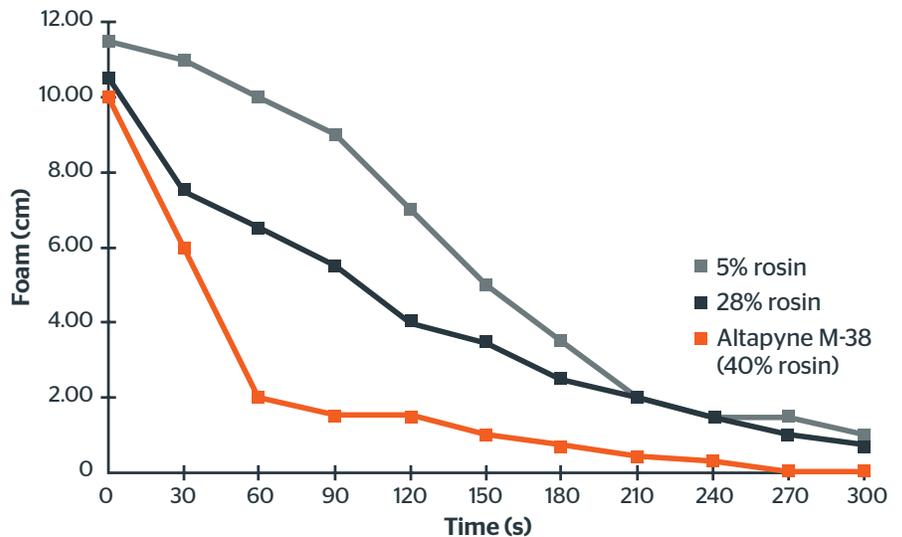
Adding DTO to your metalworking formulation provides:

- improved emulsion stability over fatty acids
- reduced foam due to higher rosin content
- better hard water tolerance than fatty acids
- reduced bioactivity relative to fatty acids

Ingevity's high rosin DTOs do not have crystallization tendencies.

Need lower foaming tendencies?

Ingevity offers a spectrum of DTOs. In a side-by-side comparison, Altapyne™ M-38 dissipates foam far more rapidly in metalworking fluid formulations than lower rosin options. If foaming is a concern, we have a product that fits your needs.



Foam dissipation

This graph compares soluble oil metalworking formulations with Altapyne M-38 and tall oils with 5% and 28% rosin acids. It shows the rate of foam dissipation over time at 1:10 dilution in 100 ppm H₂O. The test used was ASTM D1173-07.

DTO product line

Product	Acid values, minimum (mg KOH/g)	Color, maximum (Gardner)	Rosin content, maximum (%)	Country of origin
Altapyne M-28B	180	10	24-35	United States
Resiacid™ R-30	180	8	24-28	Brazil
Resinoline® BD-30	187	7	30	France
Altapyne M-38	176	9	37-43	United States
Altapyne M-50B	175	7	48	United States

Request a sample

Contact us at chemicals@ingevity.com or at 843-740-2300.

The information presented herein is believed to be accurate and reliable, but is presented without guarantee on the part of Ingevity.