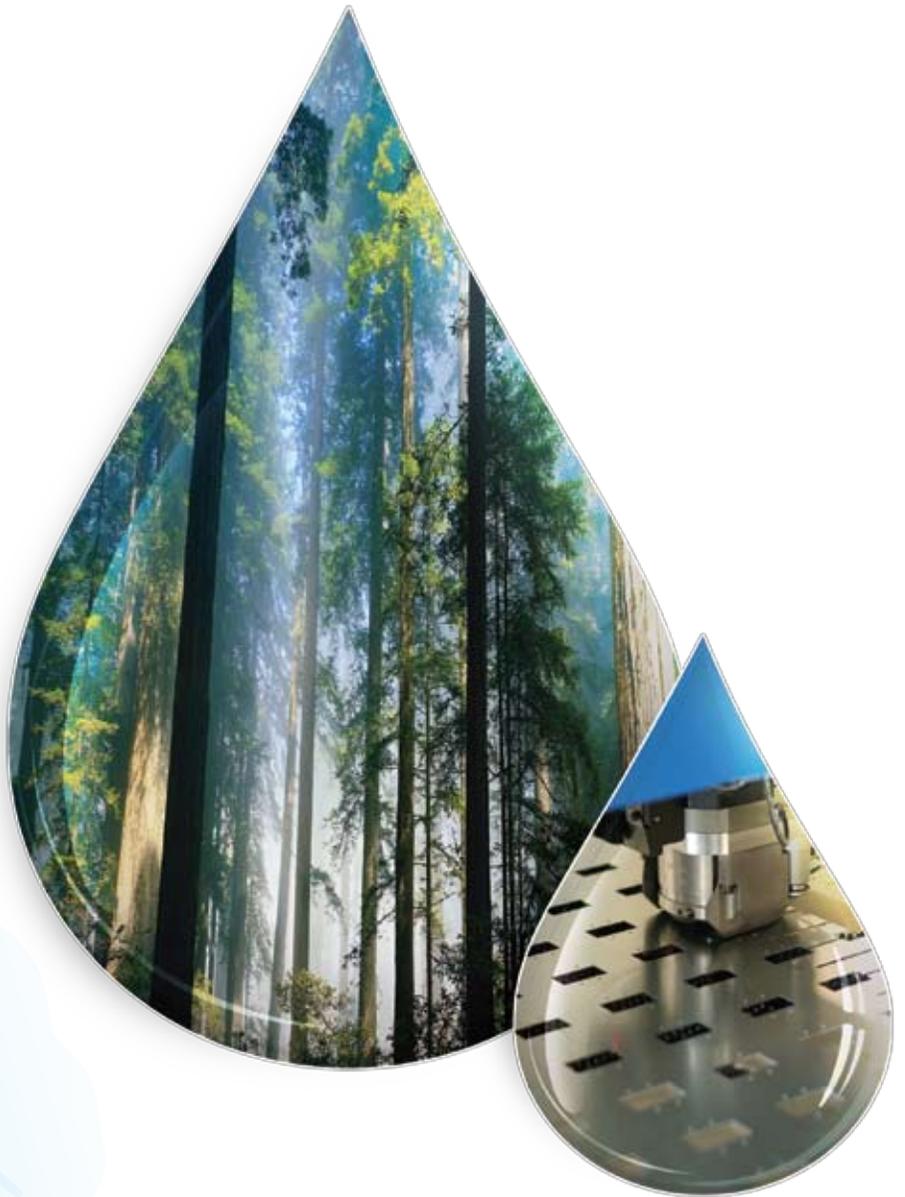


Croda Lubricants

Leading the way naturally

Perfad 8100

High performance alternative to
chlorinated paraffins



High performance lubricant ester alternative to chlorinated paraffins

Croda has developed a non-toxic, chlorine-free additive to replace chlorinated paraffins in metalworking lubricants and coolants. **Perfad 8100** provides outstanding multi-metal stamping and drawing performance in heavy duty oil-based fluids. This bio-based additive will allow formulators to create environmentally friendly products while maintaining performance. **Perfad 8100** also washes off easily, eliminating the difficulties created by chlorinated paraffins.

Typical properties

The data in the table below represents the typical properties of **Perfad 8100**.

Measurement	Unit	Typical value
Kinematic Viscosity @ 40°C	mm ² /s	1100
Kinematic Viscosity @ 100°C	mm ² /s	64
Hydroxyl Value	mgKOH/g	110
Density @ 20°C	g/ml	0.97
Flash Point (COC)	°C	292
Pour Point	°C	-29
Physical Form	-	Liquid

The frictional properties of **Perfad 8100** have been exemplified using twist compression testing. A 10% dilution of **Perfad 8100** in mineral oil was tested along side a 53% chlorinated oil. These two solutions were tested on cold-rolled steel and aluminum. Friction factor is calculated from the initial and average coefficient of friction and time to breakdown during the twist compression test.

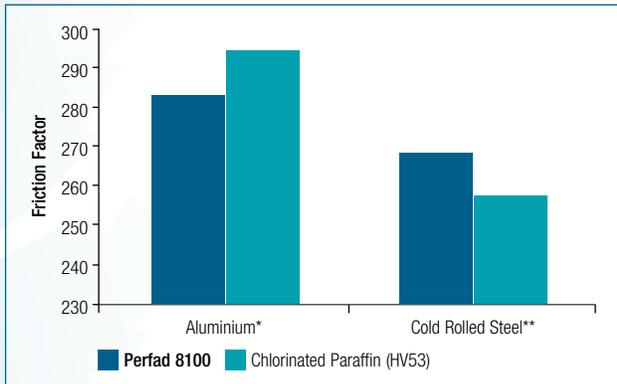


Figure 1 - TCT test data, Friction factor

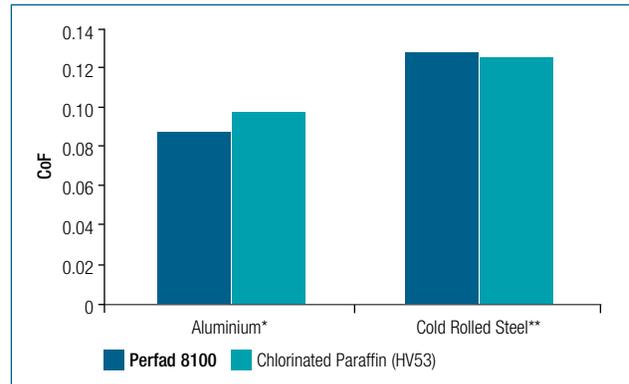


Figure 2 - TCT test data, Average Coefficient of Friction

* 10% **Perfad 8100** in mineral oil vs. 10% chlorinated paraffin. Pressure = 5 ksi

** 10% **Perfad 8100** in mineral oil vs. 10% chlorinated paraffin. Pressure = 15 ksi

Perfad 8100 demonstrates comparable friction properties to the chlorinated product, both on cold-rolled steel and aluminum.

Sales and technical support

With over 30 years experience of working with lubricant formulators, Croda's global technical specialists are able to offer advice and support in selecting the most effective products for your application. This, coupled with our extensive sales network, means we have the ability to offer the broadest range of products. **Make Croda your partner of choice.**

Further information

For more detailed product information, regulatory status, MSDS and samples please contact your local Croda Sales Office or visit our website www.crodalubricants.com. Alternatively, you can email us at lubricants@croda.com.

Non-warranty

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