

LUBE

DeoAdd[®] 8-2230

EP performance additive for forming processes

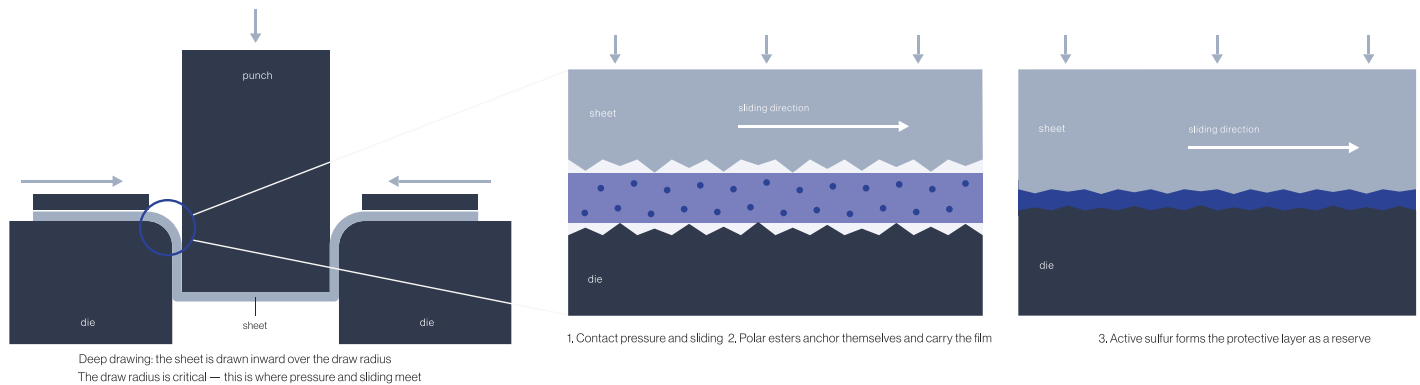
value in every step

We take additives personally.

Forming gives no second chance.

When material is formed under maximum contact pressure, only one thing separates tool and workpiece: the lubricant film. If it breaks down, the part is scrap and the tool is damaged. That is exactly where DeoAdd® 8-2230 goes to work.

What happens at the draw radius



01. Pressure

At the draw radius, the sheet is pulled over the tool under high contact pressure, bent and straightened again in the process. The problem here is not peak pressure alone, but the combination of pressure and motion.

02. Sliding

Between workpiece and tool, the lubricant film decides between process reliability and scrap. Carefully selected fatty acid esters build exactly this film — stable, resilient and load-carrying even where low-viscosity additives have long since broken down.

03. Reserve

When the film reaches its limit, active sulfur and the fatty acid esters step in and form a protective layer on the metal surface. Two stages instead of one: physical lubrication first, then chemical protection, right at the edge.

Performance comes from the choice of ester and from the stability of the film thickness. At 4,500–6,000 mm²/s, the film holds where low-viscosity additives are squeezed out.

With 16% total sulfur, 6% of it active, DeoAdd® 8-2230 is deliberately formulated on the conservative side: in forming, what counts is lubrication, not aggressiveness.



Where 8-2230 works

Forming: deep drawing, cold forging, thread forming

High-performance additive for forming operations on high-strength materials. Even low treat rates in the formulation raise lubrication performance significantly — and the viscosity

index along with it. Free of mineral oil, chlorine, transition metals and heavy metals.

Property	Value	Test method	What it means
Color	Amber	—	—
Total sulfur	16%	ASTM D6481	6% of it active, deliberately conservative: lubrication over aggressiveness
Density at 20 °C	990–1,010 kg/m³	ASTM D4052	—
Kinematic viscosity at 40 °C	4,500–6,000 mm²/s	ASTM D7042	Load-carrying film that is not squeezed out under contact pressure
Flash point, COC	200 °C	ASTM D92	Straightforward handling and storage
Copper corrosion (10% in paraffinic oil)	4c	ASTM D130	Uninhibited for formulation freedom
Viscosity index	192	ASTM D2270	Stable process conditions

No film breakdown at the decisive step

A lubricant film fails for two reasons: pressure and temperature. Viscosity is the answer to pressure. At up to 6,000 mm²/s at 40 °C, DeoAdd® 8-2230 is set exceptionally high and builds a lubricant film that is not forced out of the contact zone — not even at the draw radius.

The viscosity index is the answer to temperature. Forming generates heat, and a lubricant with a low VI thins out precisely when it has to perform most. The high index keeps viscosity stable across the process window. The lubricant film stays load-carrying, from the first part of a run to the last.

Benefits at a glance	Target applications
Polar ester base The lubricant film adheres to the metal and carries load where low-viscosity additives are squeezed out. High viscosity A stable lubricant film even under high contact pressure. High viscosity index Lubrication performance stays stable across the process temperature range. Free of mineral oil, chlorine and heavy metals No changeover risk from tightening chlorine regulations, and easy disposal. Effective even at low treat rates Measurable from single-digit percentages, usable up to 50% as a base component.	 Forming processes: Deep drawing, cold forging, thread forming  Materials: Low- to medium-alloy steels  Formulations: oil-based

