



# ADDITIVES FOR ADHESION & CORROSION INHIBITION

***Lubrizol***

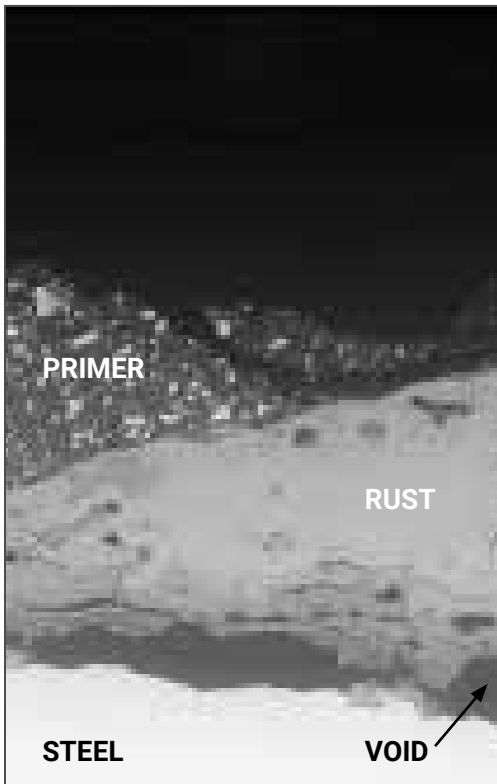
**Performance Coatings**

[www.lubrizol.com/coatings](http://www.lubrizol.com/coatings)

# A RECOGNIZED LEADER IN CHEMISTRY FOR METAL PROTECTION



Lubrizol Performance Coatings is a recognized leader in chemistry for metal protection. We offer a broad portfolio of resins and additives for automotive and industrial finishes, from the pretreatment to refinish stages of the product life cycle. Drawing upon vast technical resources and decades of experience, Lubrizol is uniquely qualified to add value by developing products that are both innovative and responsive to customer needs.



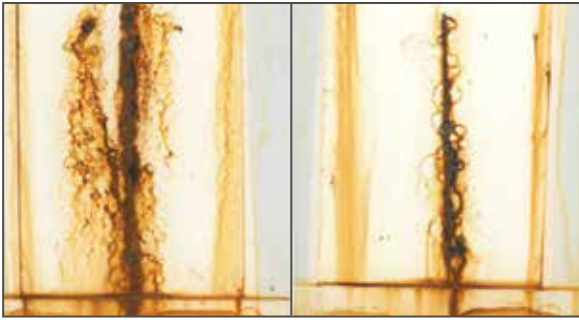
SEM view of rust undercutting primer (250x)

## Additives for Better Metal Protection

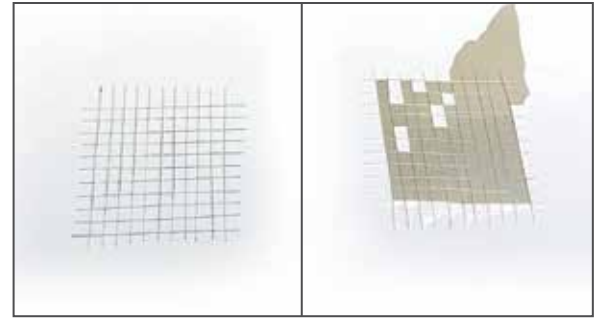
Lubrizol additives protect metal from corrosion and improve direct-to-metal adhesion, as well as intercoat adhesion. These additives are compatible in both water-borne and solvent-borne systems. They can be incorporated as a component in DTM coatings, primers or wash primer formulations. Proven in a variety of applications, particularly automotive and industrial metal finishes, Lubrizol corrosion inhibitors include:

- **Lubrizol® 2062H** - improves adhesion to various metal substrates, passivates metal
- **Lubrizol® 2063** - improves adhesion to various metal substrates as well as intercoat adhesion, passivates metal
- **Lubrizol® 2064** - provides long-term corrosion resistance
- **Solplus™ AC100** - provides flash rust protection in aqueous coatings while aiding in corrosion protection beyond the period for rust to form

The volume expansion of rust is approximately two to four times greater than the original metal. This volume expansion of the oxide causes the oxide layer to crack, allowing an influx of water and oxygen, yielding more rust.



Spray salt results showing the corrosion inhibition with a Lubrizol additive at right, and without at left.



Cross-hatch test results showing adhesion with a Lubrizol additive at left, and without at right.

## Lubrizol Additives

Lubrizol corrosion inhibitors and adhesion promoters enable formulators to deliver the enhanced durability and longevity that OEM specifications require.

Additives				
Benefits	Lubrizol® 2062H	Lubrizol® 2063	Lubrizol® 2064	Solplus™ AC100
Enhances long-term corrosion resistance	•	•	•	•
Reduces flash rust	•	•	•	•
Improves metal coating adhesion	•	•		
May enhance adhesion to poorly prepared substrates	•	•		
Excellent for metal passivation	•			
Can be used to complement zinc phosphate, boosting effectiveness		•		
No adverse impact on storage stability	•	•	•	•
FDA-approved (21 CFR 175.260)		•		
Improves intercoat adhesion		•		

Additives					
Compatibility		Lubrizol® 2062H	Lubrizol® 2063	Lubrizol® 2064	Solplus™ AC100
Substrate	Recommended for cold rolled steel (CRS)	•	•	•	•
	Recommended for galvanized metal	•	•	•	•
	Recommended for aluminum	•	•	•	
Chemistry	Water-borne systems	•	•	•	•
	Solvent-borne systems	•	•	•	
	Thermosetting alkyds	•	•		
	Acrylics	•	•	•	
	Polyesters	•			
	Lacquers	•	•		
	Polyols		•		
	Epoxies				
	Thermosetting polyesters		•		
	Alkyds			•	

• Recommended

# Lubrizol Locations

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Lubrizol Performance Coatings is a market-driven innovator of specialty chemicals for coatings, inks and composites. Our portfolio of resin, binder, dispersant, wax additive and specialty additive technologies solves challenges across a wide range of markets and applications. Formulators choose Lubrizol to benefit from our innovative technologies, customer collaboration and global reliability. More than just a supplier, we are a valued partner with extensive experience in surface protection, dispersion, adhesion and barrier properties. We work closely with customers to enhance the performance, productivity and sustainability benefits of their products and drive new opportunities for market success.



## **Performance Coatings**

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