

HIGH-HEAT  
EXPANDERS

ADVANCED NEGATIVE EXPANDERS  
APPLICATION GUIDE

ADVANCED EXPANDERS

# 2800 SERIES

Engineered for E-Rickshaw, AGM, EFB & SLI Battery Applications.

Powered by

**LIGN3X**  
Enhanced Lignin Formula

HAMMOND GROUP, INC.

**HAMMOND**  
THE CHANGE CATALYST®

## LIGN3X™

### Hammond's Composite Lignin Breakthrough

For years, battery engineers have sought ways to maximize the negative plate's charge acceptance without the costly trade-off of increased water loss, which can shorten battery life and reliability — an insurmountable problem until now. Hammond's new LIGN3X™, targets the vulnerable areas and suppresses the negative reactions. The result is a new class of expanders that not only boosts charge acceptance, but also significantly reduces water loss—without sacrificing other critical performance attributes.

### Advanced Expanders 2800 Series

#### Cost-Effective Premixes that Improve Dynamic Charge Acceptance & Reduce Water Loss

Hammond's new 2800 Series of Advanced Expanders with LIGN3X™ builds on our past high-heat successes. LIGN3X™ maximizes charge acceptance while at the same time reducing water loss in these 15 Advanced Expanders for E-Rickshaw, AGM, EFB, and SLI.

SEE APPLICATION GUIDE ON REVERSE SIDE.

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## PERFORMANCE ADDITIVES

## ADVANCED NEGATIVE EXPANDERS APPLICATION GUIDE

### DESCRIPTION

Formulated for high-heat applications requiring high charge acceptance, low water loss, and low gassing.

### APPLICATIONS

**E-Rickshaw  
AGM  
EFB Auxiliary  
Starting, Lighting, Ignition**

### SELECTION GUIDE

EXPANDER TYPE	APPLICATION
HE-2820	E-Rickshaw
HE-2825	E-Rickshaw
HE-2855	E-Rickshaw
HE-2865	E-Rickshaw
HE-2800	AGM
HE-2813	AGM
HE-2853	AGM
HE-2883	AGM
HE-2812	AGM / EFB
HE-2867	EFB
HE-2890	EFB
HE-2810	EFB / SLI
HE-2815	SLI
HE-2833	SLI
HE-2850	SLI

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Hammond Group, Inc.  
2901 Carlson Drive, Suite 200  
Hammond, IN 46323 USA  
Phone: (219) 931-9360



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### NOTES

This information sheet illustrates typical applications for these expanders. For more details or if specific values are required or if packaging information is required, please contact your area sales representative.

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