



Specialty and Custom Chemicals Since 1968

ETHOFLEX™ ER

This product is covered by the following patent: US patent 9,371,435



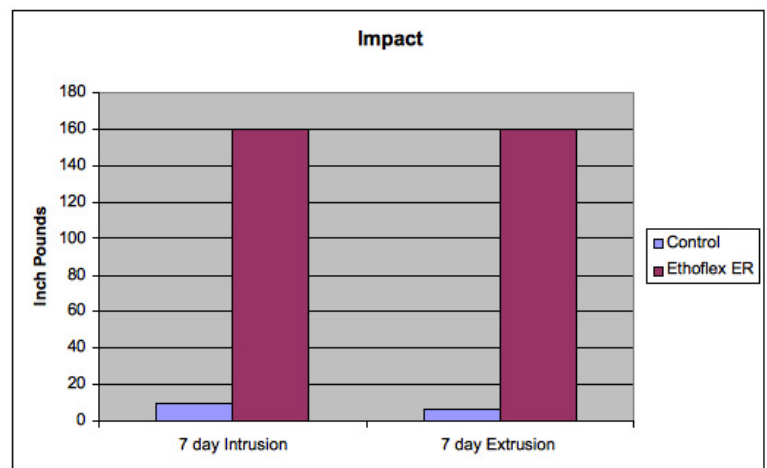
EPOXY ADDITIVE

PERFORMANCE BENEFITS

EthoFlex™ ER is an additive for epoxy coatings. With this single additive a number of epoxy coating properties are improved. These include toughness, impact resistance (Fig.A/B), corrosion resistance (Fig.C), gloss, weathering resistance, and adhesion. Not only does no other additive do all of these things without hurting pot life (Fig.D) or cure time, or increasing VOCs, the performance of EthoFlex™ ER exceeds the performance of most other single-property additives in their designed use. Usage is 5-30% depending on the quality of the starting epoxy resin and hardener.

FIG.A ASTM D2794-93 IMPACT TEST

Adding 30% EthoFlex™ ER to epoxy formulations dramatically improves impact resistance.



EthoFlex™ ER also offers superior dispersion properties for zinc in primer coatings. Settling in the primer leads to hard packing of the zinc powder on the bottom of the container. The use of EthoFlex™ ER greatly slows zinc settling rates.

FIG B: Impact test panels for testing in Figure A. Left panel was for control with no EthoFlex™ ER additive, while the right panel had 30% EthoFlex™ ER added. The panel did not fail at the maximum setting for the tester.

STANDARD

15% ETHOFLEX™ ER

30% ETHOFLEX™ ER





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FIG C CORROSION RESISTANCE SALT SPRAY ASTM B 117-09 1056 HRS.

STANDARD 15% ETHOFLEX®ER 30% ETHOFLEX®ER

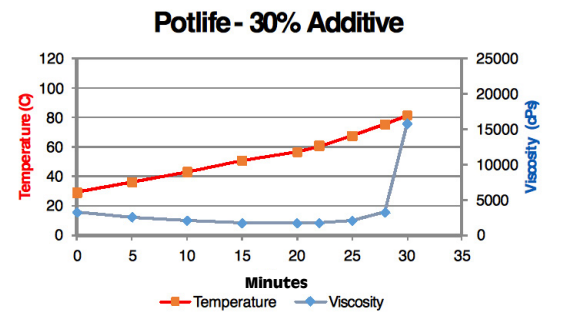
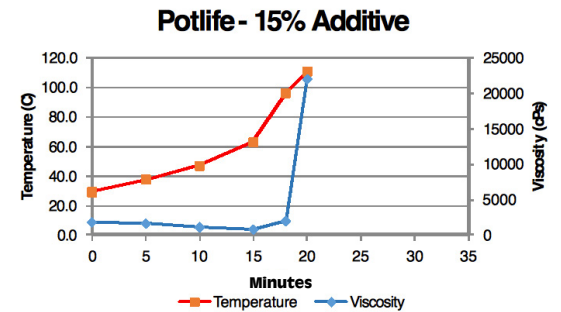
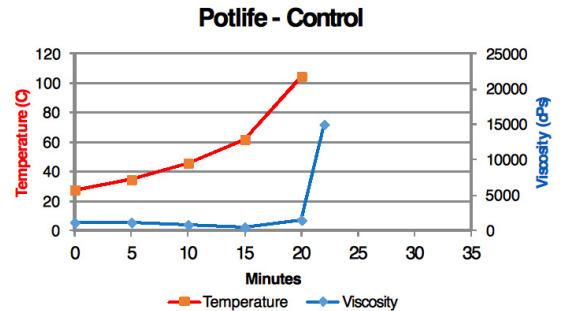


Zinc-rich primer formulation:

Ingredients	Mass	Volume
Part A	(lbs.)	(US Gallons)
Epoxy Resin	92.1	9.5
Dispersant	6.0	0.8
Suspending Agent	25.0	1.6
EthoFlex™ ER	39.5	4.4
Zinc Dust	2023	34.8
Cross Linker	20.0	2.3
Methyl Isobutyl Ketone	19.8	3.0
Acetone	19.8	3.0
Other Solvent	135.4	18.6
Part B		
Curing Agent	125.3	15.4
Suspending Agent	2.5	0.2
Extender, talc	76.0	3.2
Acetone	13.2	2.0
Butanol	12.8	1.9
Total	2610	101

FIG.D ETHOFLEX™ ER POTLIFE.

Adding 30% EthoFlex™ ER extends pot life.



TECHNICAL CONTACT

Edward R. Godwin | Coatings Additives Manager
704-562-2554 | egodwin@ethox.com

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