



BASF Corporation

N-ECN / IT Color Group

1/17/2006

Charles Anderson
ICF Consulting

RE: Feedback on ENERGY STAR Draft 1 Version 2.0

Dear Mr. Anderson,

BASF has been an active ENERGY STAR partner for a number of years and welcomes this opportunity to comment on the newly proposed Draft 1 Version 2.0. Following are our thoughts on the various components of that proposal:

EPA Proposal: Initial Thermal Emittance requirement of 0.75. Partners must submit emittance data for all ENERGY STAR qualified products by the effective date of the revised specification.

BASF Comments: We enthusiastically support the new emittance requirement of 0.75. However, it is our feeling that requiring current partners to provide individual data for each ENERGY STAR roofing product may be very time consuming, especially for those partners who have a significant number of products currently listed on the ENERGY STAR web site. As an alternative we recommend that partners be allowed to submit a letter verifying that their products are in compliance. For example, BASF currently sells two types of solar reflective coatings. All of the colors within those product lines are designed to exceed 0.75 emittance. We also keep an internal record that tracks the radiative properties of every "Cool" color we sell and would be happy to provide that information as further confirmation.

EPA Proposal: Test procedures for Thermal emittance, ASTM 1371 and E408

BASF Comments: We respectfully point out that only one or two labs within the country still have the Emissometer designed for ASTM E408. In addition, we have seen that there can be significant differences between readings taken by ASTM 1371 and E408. That being said, we are confident that our products will pass regardless of which Emissometer is used, and therefore have no problem with either of these test methodologies.

EPA Proposal: Variegated roof products testing according to CRRC Test Method 1.

BASF Comments: BASF agrees with the proposal.

EPA Proposal: Solar Reflective aged testing must be performed on uncleaned samples.

BASF Comments: BASF agrees with the proposal.

EPA Consideration: Raise initial low slope roof product solar reflectance requirements to 0.70 while still maintaining the aged value of 0.50.

BASF Comments: BASF strongly opposes this suggestion and are of the opinion that if adopted, it will have a very negative effect in the market for Steel building products. The reasons for our concerns are as follows:

1. Bare Galvalume roofing. It is often over-looked that a sizable portion of the Building products industry consists of bare Galvalume roofing products. These products provide customers with the stylish 21st century look of bare metal. BASF supplies a clear coat to this market segment that imparts a solar reflective barrier, resulting in an emittance near 0.75, and a reflectance around .65. Unfortunately, the only way to increase those radiative properties is to add pigment, which in effect covers the substrate and ultimately eradicates the look of bare metal-, defeating the whole purpose of the entire product line.
2. White Coatings. In metal roofing products, a solar reflective rating of 0.70 can only be achieved with the brightest of whites. In other words, 0.70 is not just any white, but a very clean white, which leaves little room for customer taste or preference. Based upon our testing we have found that most white metal roofing products fall in the 0.60- 0.70 ranges. A requirement of this nature would effectively eliminate most metal roofing whites from ENERGY STAR compliance; whites colors that have names like Polar White, Ivory, Regal White, and others.

EPA Consideration: Allowance of accelerated aging techniques to determine the maintenance of solar reflectance.

BASF Comments: While we agree with other stakeholder's opinions that accelerated testing is unreliable, we still believe there is a need for providing the marketplace with a faster way of getting their roofing products registered with ENERGY STAR. Therefore, we would like to see the EPA adopt a similar policy to that being used by the CRRC, which lists both initial and aged radiative properties. Independent and industry laboratories recognized by the CRRC could also be authorized by the EPA to certify radiative properties.

In conclusion, BASF values our partnership with ENERGY STAR and would like to offer our services for future discussions, needs for pertinent industry data, committee functions, round robin testing, etc. BASF was the pioneer in the Cool roofing industry, and worked closely with leading laboratories and legislative bodies in the past to launch Solar reflective coatings. Therefore, if we can be of any further service in these matters please don't hesitate to contact us.

Sincerely,

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