
A newsletter for present and future  addenda polymer additive customers.

A Message From...

Good News

No. 1 Event of Millennium involves Lead

According to *Life Online*, the number one event in the past 1000 years was the printing by Johann Gutenberg of 200 gorgeously typeset Bibles in 1455. "He unleashed an information epidemic that rages to this day." Within its first 45 years of use "...an estimated half a million printed books were in circulation: religious works, Greek and Roman classics, scientific texts, Columbus's report from the New World."

In an age when "...the ability to read was confined mostly to tiny elites of nobles, priests and scribes...., Gutenberg designed a new kind of press, based on those used to squeeze olives. **He came up with an alloy of lead, tin and antimony and a precisely calibrated type-mold to pour into it.**"

What Gutenberg devised was the first Western movable-type system that worked – so well that it remained virtually unchanged for 350 years.

...Gary R. Mitchener 

Good news About PVC...

Panel, Former US Surgeon General Clear Phthalate Plasticizers

Phthalate plasticizers found in toys and medical devices do not pose any health risk to children or adults, an independent panel of physicians and scientists chaired by former US Surgeon General Dr. Everett Koop said last week.

The panel was convened by the American Council on Science and Health following allegations by Greenpeace, a once significant activist group, that has, in recent years, been plagued by financial problems and declining membership.

"For too long, a small group of activists have unnecessarily frightened parents and people under medical care with false allegations of dangers from plasticizers used in vinyl plastic," says Tim Burns, executive director of the Vinyl Institute, Washington, D.C.

"With 40 years of proven safe use of vinyl products, common sense told us that the activists were pursuing a political agenda, not a scientific one," Mr. Burns notes.

"Consumers can be confident that vinyl toys and medical devices are safe," said Dr. Koop.

Does Evidence of Exposure Mean Adverse Health Effect?

Not necessarily!

In a newly released report, *Traces of Environmental Chemicals in the Human Body: Are They a Risk to Health?*, the physicians and scientists of the American Council on Science and Health (ACSH) conclude that exposures to small amounts of environmental chemicals are not necessarily detrimental to human health.

The tendency of some evaluators has been to assume that any detectable level of an exogenous substance implies an "adverse effect." This approach is both unscientific and misguided, however, because it fails to consider dose-response relationships, detoxification mechanisms, and other factors. The mere fact that we can measure a trace chemical or its byproducts in the body does not mean that that level of that chemical will cause an adverse effect – or even that it will produce any biological response at all.

"The human body has numerous mechanisms built in to deal with environmental chemicals," says ACSH President Dr. Elizabeth Whelan. "Americans are constantly being bombarded with warnings about dire health consequences from traces of environmental chemicals. But, in truth, many of these warnings simply relate to evidence of exposure, not any demonstrated adverse effects on health."

For a complete copy of the report, visit the ACSH web site at www.acsh.com.

We specialize in additive value.

Addenda Unveils Initial Product Line

Addenda Corporation's initial line of polymer additives to include stabilizers and lubricants for PVC.

Heat stabilizers will be marketed under the addiStab™ name and lubricants will be marketed under the addiLube™ name. The principal markets for the initial products will be flexible and rigid PVC, especially wire and cable.

Specifically, the initial product offerings will be:

addiStab™ - CZ 34	Calcium/Zinc
addiStab™ - TLF	Tetrabasic Lead Fumarate
addiStab™ - BLC	Basic Lead Carbonate
addiStab™ - TLM	Tribasic Lead Maleate
addiThal™	Dibasic Lead Phthalate
addiBase™ - Tri	Tribasic Lead Sulfate
addiBase™ - Mono	Monobasic Lead Sulfate
addiBase™ - Tetra	Tetrabasic Lead Sulfate
addiPhos™	Dibasic Lead Phosphite
addiLube™ - NLS	Normal Lead Stearate
addiLube™ - DBLS	Dibasic Lead Stearate



Optimizing Your Stabilizer Addition

Six Steps to a Great Lead Stabilizer Addition

1. Understand the Purpose of Dry Blending

The purpose of dry blending process is simple and straight forward. It is essential that all of the various vinyl ingredients be uniformly blended as a first step in the compounding process.

2. Understand the Purpose of the Stabilizer

Since one of the purposes of the stabilizer is to protect the resin from heat degradation, let's add it early in the blending process – with or right after the resin addition. The objective is to achieve good mixing and dispersion of the lead stabilizer particles with the resin before a significant heat history has occurred.

3. Consider the Density of the Stabilizer

Lead stabilizers have specific gravities (densities) 3 to 5 times higher than the PVC resin. This suggests adding the material as slowly as feasible. One big scoop full of heavy particles will go straight to the bottom and require much longer to disperse, especially in a low-shear type ribbon mixer.

4. Avoid Agglomeration

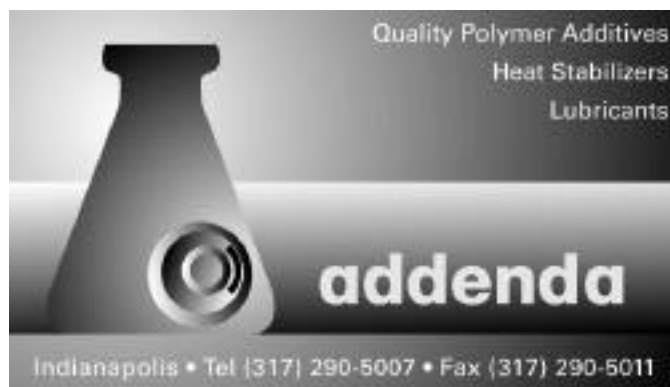
If plasticizers are to be added, the stabilizer should be uniformly mixed with the resin prior to the start of the plasticizer addition. If the stabilizer particles go straight to the bottom and are not off the bottom and evenly distributed by the time the plasticizer is added, the plasticizer might wet and agglomerate the stabilizer particles and the mixer heat might cause eventual dispersion problems and/or lower heat stability.

5. Ventilate

Even though stabilizer particles have a high density, they are so small that they can easily become airborne. Care should be taken to safely handle the stabilizer in a way that achieves two primary objectives. First, the mixing equipment should be under a slight negative pressure so that dust created in the mixing cycle does not escape into the air outside the mixer. Secondly, a combination of safety equipment, ventilation and training should be used to avoid employee exposure (inhalation or ingestion) to dust during handling and addition to the mixer. Always consult the appropriate MSDS sheet(s) for detailed information.

6. Use an addenda Product

Addenda products provide exceptional quality and consistency from a trusted domestic source.



World Consumption of Lead on Rise

World consumption of lead rose 2.9% during the first four months of 1999 compared to the same period last year, according to data compiled by the International Lead and Zinc Study Group. They also reported that refined lead production increased 4 percent. Lead is a naturally occurring element that has some very unique properties that are in demand by and useful to consumers.

SAB Joins Criticism of TCLP

The Science Advisory Board (SAB) has joined in suggesting to the EPA that the Toxicity Characteristic Leaching Procedure (TCLP) is a problem. In a recent letter to the EPA, the TCLP has been criticized by EPA's SAB as not accounting for the multitude of parameters that affect leaching under field conditions. The SAB further said that the TCLP has been applied in situations where it is inappropriate and noted that it has had two significant legal challenges made to its application in particular settings.

The EPA will accept written public comments for up to 60 days after the public hearings on the subject, held in late July. Written comments should refer to docket number WLPA-FFFFF and be sent to RCRA Docket Information Center, Office of Solid Waste (5305G), EPA, 401 M St., S.W., Washington, D.C. 20460.

This could impact lead stabilized PVC waste issues and the pending petition from Lead Industries Association (LIA).

U.S. Court of Appeals Ruling..... Not Liable if Sold For Recycling

Some case law has found that companies that sell contaminated or hazardous material cannot be held liable as arrangers or generators under superfund if the material was sold for recycling purposes.

The U.S. Court of Appeals ruled in 1998 that railroads that sent used worn wheel bearings to a metals foundry for fashioning into new bearings were not liable under CERCLA as arrangers or generators, even though the bearings contained CERCLA hazardous substances. (Pneumo Abex Corp. v. High Point, Thomasville and Denton R.R. Co. 4th Cir., No. 97-1593, 4/29/98).



addenda

Addenda Corporation
5901 Lakeside Boulevard
Indianapolis, IN 46278

Phone: 317 290-5007
Fax: 317 290-5011