



Cure Blends



Mixing with confidence.

Cureblends

Accurate • Consistent • Reliable • Cost Savings

These are some of the words used to describe Akrochem Cureblends. In today's marketplace, the need for consistency is paramount. Consistency means operating more efficiently, saving time and money. Companies need to become lean and do so without compromising quality. To help fulfill these goals, companies turn to the use of pre-blended, pre-weighed chemicals to help them achieve uniform batch-to-batch consistency for their rubber compounding. Providing pre-weighed cureblends in batch-inclusion bags is a perfect way to improve quality, handling and address the health and safety concerns of dealing with rubber chemicals. One bag, no weighing... just drop it in the batch and let the mixer do the rest! The benefits of using cureblends are numerous and far-ranging.

WE HAVE ADDRESSED SOME FREQUENTLY ASKED QUESTION CONCERNING AKROCHEM CUREBLENDS.

What are Cureblends?

Cureblends are custom made, homogeneous blends of compatible chemicals used for the curing and / or protecting of rubber articles. Akrochem custom-made cureblends are created from your formulation and tested to make sure each blend is consistent and will perform to the highest quality standards per your specifications. Care is taken to ensure that each chemical that goes into one of our cureblends is of the highest quality and purity available to the industry.

Why are Cureblends used?

Cureblends are practical and convenient to use. They are ideal for long-run compounds where they contribute to cost savings and improve batch-to-batch uniformity. Pre-weighed Cureblends in batch inclusion bags significantly reduces the health and safety concerns of handling raw chemicals.

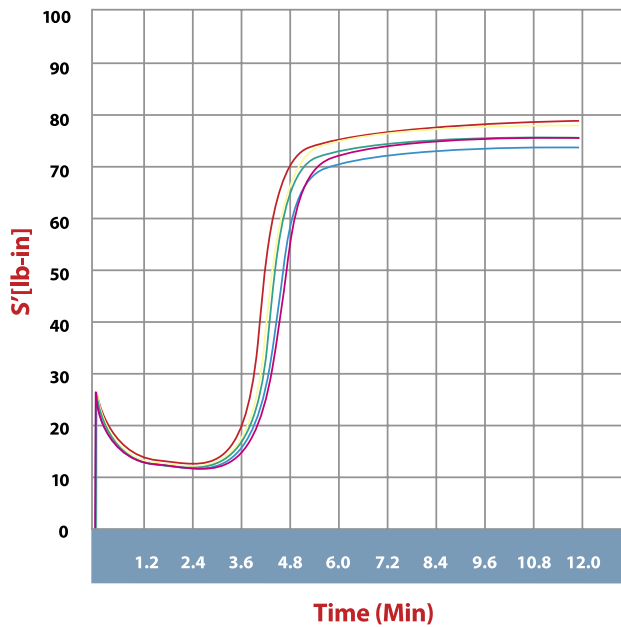
Are Cureblends effective?

Cureblends can reduce the variation from weighing individual chemicals by more than 50%. This helps eliminate variation in compounding due to weighing errors. The following rheometer charts show the increased consistency from batch-to-batch mixing using cureblends vs. individually weighed chemicals. Uniformity and batch-to-batch consistency not only makes a great looking rheometer chart, but it also:

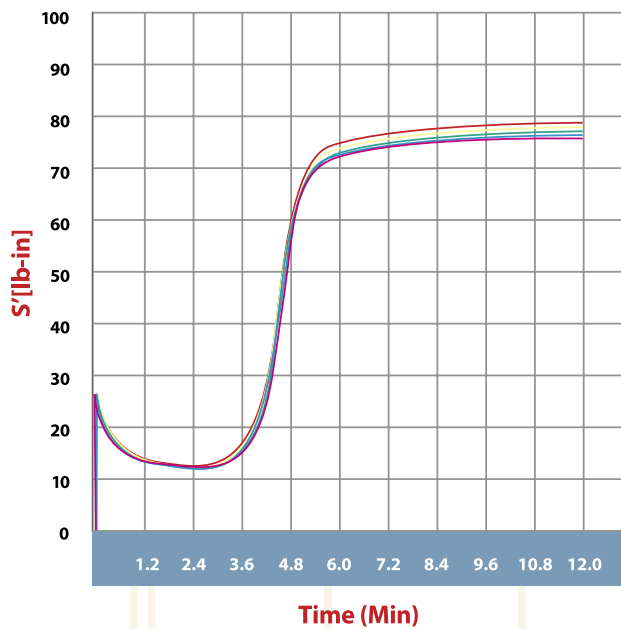
- Improves consistency with press cures,
- Increases productivity,
- Reduces downtime resulting from making press adjustments from batch-to-batch,
- Reduces the scrap rate in compounding and final product, and
- Helps the mill room and press room run more efficiently.

Akrochem cureblends provide batch-to-batch consistency exhibited by the rheometer cure curves below. Cureblends can provide a 50% reduction in rheometer cure variation due to more consistent weights and blending of chemicals.

Typical rheometer spreads obtained from chemicals weighed individually.



Typical rheometer spreads exhibiting batch-to-batch uniformity from using an Akrochem Cureblend.



What about the lot-to-lot consistency of Cureblends?

Each lot of Akrochem cureblend has to meet strict quality standards that are established from your specifications. This ensures each lot of Akrochem Cureblend will perform consistently from batch-to-batch of rubber compound mixed.

Quality rubber compounding is assured because:

- You can achieve more accurate and consistent weights and more thorough chemical incorporation which results in more consistent rheometer cure curves. This will translate to the pressroom running more efficiently
- You'll be assured of the presence of critical materials in a compound that are not easily tested for (such as antioxidants, antiozonants, etc.)
- You'll gain full traceability on all raw materials
- SPC data is available
- Quality control record keeping is reduced

What about chemicals that react with each other?

When necessary, Akrochem Cureblends employ a bag-in-bag system that allows us to take reactive chemicals, place them in a separate batch inclusion bag and then place that bag in the primary batch inclusion bag with the other chemicals that are customized for that cureblend. Extensive testing and quality assurance measures are taken to ensure the compatibility of chemicals for each cureblend.

Do Cureblends contain chemicals other than accelerators?

Cureblends can be blends of various types of chemicals used in the compounding of rubber goods. For instance, a typical cure blend may contain components of the cure system and/or antioxidant, antiozonant, processing aid, activator or other small volume chemical(s) that are essential to the processing of the rubber compound or the performance of the final rubber article.

Cureblends

are best suited for compounds with long runs.

This will maximize cost savings.

Why should I use Cureblends?

Cureblends are a cost effective approach to improving productivity.

Cureblends:

- Provide fewer processing variations due to weighing chemicals individually.
- Eliminate contamination of chemicals.
- Reduce “fly-loss” to the dust collector.
- Pre-weighed, batch inclusion bags reduce:
 - weighing errors,
 - contamination
 - health and safety concerns.
- Increase productivity by reducing mixing cycle time.
- Reduce set-up times at the mixer, calender, mill, extruder and/or injection press.
- Reduce scrap rate both in the mixing department and the press room.

How can I save money by using Cureblends?

Cureblends from Akrochem offer your company significant long-term savings by providing:

- Reduced labor costs in weigh-up, material handling and ordering of chemicals.
- Reduced waste disposal.
- Decreased inventory of raw materials.
- Reduced testing of incoming raw materials.
- Decreased scrap in both raw stock and finished goods.

How about my specific needs?

Akrochem has the manufacturing flexibility to produce large or small quantities of cureblends. This flexibility allows Akrochem to work with a customer to develop the appropriate cureblend(s) that will suit their needs.

How is the quality of a Cureblend assured?

- Akrochem provides full traceability of all raw materials used in every cureblend.
- Each cureblend produced is lab tested to previously agreed upon specifications.
- The cureblend formulation is evaluated prior to production to separate interactive chemicals.
- Testing of incoming raw materials, including FTIR.
- Finished cureblends are subjected to rheometer testing and FTIR verification.
- A computer-controlled weigh-up system will not allow weights outside of tolerances to be packaged. Weighing tolerances are one percent (+/- 1.00%) max.

How are Cureblends packaged and shipped?

- For convenience, Akrochem pre-weighed, cureblends are packaged with the following batch inclusion bag options:
 - Polymer compatible, low-melt PBD resin bags.
 - Low-melt point EMA or EVA bags.
- These pre-weighed cureblends are shipped in the following container options:
 - Heavy duty Gaylords®.
 - Returnable plastic Gaylords.
- Bulk packaging of cureblends is available with the following options:
 - Boxes, bags, drums, Gaylords and Supersacks

How should Cureblends be stored and what is the expected shelf-life?

It is recommended that each cureblend be stored in a separate sealed container. Also, it is preferred that cureblends be stored in a temperature controlled environment, away from heat, moisture and direct sunlight.

Cureblends should be used within six months of the date of manufacture. Cureblends can be re-qualified if they are past their date of expiration by submitting them for testing to determine the quality of their function in a rubber compound. As a convenience, Akrochem will gladly test any of our chemical cureblends that have expired.



Commitment To Quality

Before and after the sale.

Akrochem is committed to providing consistent, high-quality cureblends made from high-quality raw materials to meet the individual needs of our customers.

Please contact your Akrochem Technical Sales Representative or Technical Service personnel to help you select or develop the most appropriate cureblend to meet your needs.

Although the data presented is accurate to the best of Akrochem Corporation's knowledge, it is furnished without warranty, expressed or implied.

Akrochem Corporation does not assume any legal responsibility for use of these products and these products are purchased at buyer's risk.



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