

Technical Data Sheet

[DE-LINK R NR?NBR?EPDM]

Introduction:

De – Link R is a polymer based masterbatch containing a unique blend of specialised chemicals designed to break the sulphur–sulphur bonds, or cross-link sites, in vulcanised rubber materials or products. It is available in Natural, Nitrile and EPDM polymer bases.

Uses:

It is used to “unvulcanise” cured rubber products and so render them pliable and re-mouldable. Unlike the reclaim process where high temperatures and aggressive chemicals break down the polymer chains into shorter and shorter lengths until the material can be processed again, but it is nothing like the original material. The cross-links are all still present.

Typical Characteristics:

Product Description			
	Appearance	Bluish grey solid slab	
	Odour	Hardly any	
Composition	Not disclosed		
	Substance	% by Weight	
	n/a	n/a	
Properties	Not relevant		
	Property	Unit	Value

Application/ How to Use:

The product / material to be treated should first be ground down to something like crumb. The De-Link is then added using as high a shear rate as possible using a two roll mill (set on a1 high friction ratio, and a very tight “nip”), or an internal mixer, (the mill is preferred). The mix should be repeatably run through the nip until it forms a continuous sheet and holds itself up on the mill bowl. Obviously, cured material will not do that, so it is a sure sign that the cross-links have been broken. In that form the material can be re-moulded and cured (vulcanised), without the addition of any further ingredients i.e. sulphur + accelerators. You can not do that with reclaimed rubber.

However, it is better used to recycle vulcanised moulding waste and reject components and it can be done in house. When the de-linked material is incorporated into new compound, its polymer content can replace new, raw polymer in the formulation. Similarly the filler and softener contents can replace new material.

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Cost considerations:

Obviously the De-Link has to be purchased, and the mechanics of using it imparts another cost. However, the extra cost is more than covered by the actual savings made:-

Cured waste is not thrown away. Putting it into landfill can involve a substantial cost.

Replacement of some of the new raw materials, particularly the expensive polymer content, can be a large cost offset. The materials in the de-linked waste have already been paid for, and now are released for FOC re-use.

Shelf Life:

Almost unlimited if stored sensibly i.e .cool and dry

Packaging:

25 kg bags, or banded blocks.

Health & Safety:

Detailed advice on the Health & Safety aspects of this product is given in the individual product Safety Data Sheet (SDS), available upon request, or available to download and print direct from our web site

www.allcocks.co.uk