

5 TOP 5 THINGS YOU NEED TO KNOW ABOUT:

PLASTICIZERS AND MEDICAL DEVICES

For better or worse, broad movements to eliminate DEHP and phthalates from medical devices (and other products as well) have gained such momentum that many in the medical industry are anticipating the day when they are no longer able to manufacture products that contain any of these substances. Understanding the nuances and trade-offs of the chemistries and compounds under fire is the best long-term planning.

1 It's not PVC...It's what's in the PVC.

Perhaps you've heard rumblings of a movement to "get PVC out of healthcare facilities and medical products", but do you have the full picture on what the argument over PVC is all about?

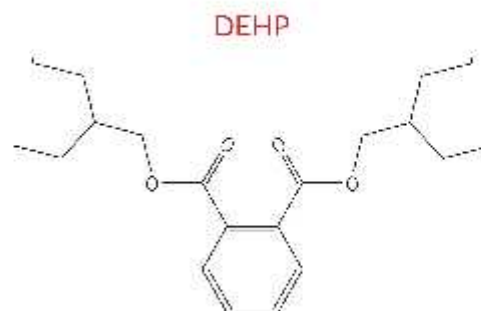
- Understand what is behind the charges against PVC compounds and the ingredients that go into them
- Getting out of PVC may not be the right framework for the conversation – it might be more subtle than that
- If you make medical devices, you need to be informed



2 DEHP, DEHP, DEHP.

DEHP is a widely used and well known plasticizer in PVC, and consequently you cannot have a discussion about PVC in medical devices without DEHP coming into play. But how much do you know about it?

- DEHP is the most widely used plasticizer in medical grade PVC and has been used for decades without any evidence of harm to patients
- DEHP is part of the ortho-phthalate family of plasticizers and phthalates in general are under attack by those that want to prevent their use



3 What are phthalates and are they all alike?

Phthalates are a family of oily, colorless, odorless liquids that are used in a wide variety of everyday products. Are all phthalates DEHP and if not, what are the differences?

- All phthalates have two ester groups but their structure is not the same; this makes a difference
- There are ortho phthalates and there are tere phthalates; it is the location of the ester groups that defines them
- Find out why one is a problem and the other isn't – and what that difference means to you

BASIC MOLECULAR VIEW OF A PHTHALATE

Ortho-phthalates or Dialkyl Ortho-phthalates



Tere-phthalates or Para-phthalates



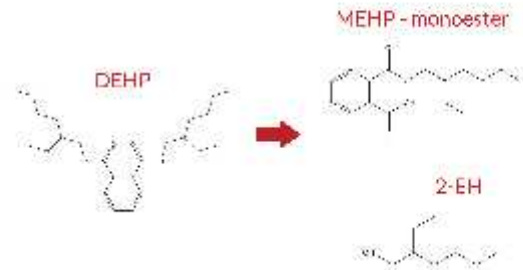
4 What makes phthalates so controversial?

Testing has shown that some phthalates cause cancer in rodents – but what about in humans?

- Ortho-phthalates become biologically active and cause cancer in rodents
- Tere-phthalates, however, largely pass through the metabolism of rodents without doing damage
- Find out more about the rodent toxicology data and how to avoid using phthalates that are targeted for regulation

THE CHARGE AGAINST DEHP

DEHP undergoes incomplete hydrolysis



5 You have options when it comes to DEHP, phthalates and even PVC.

DEHP and other ortho-phthalates are still widely used but regulations against their use are on the rise. The good news is that you have commercially viable, cost-effective options available right now. Consider:

- Tere-phthalates like DOTP
- Non-phthalates like DINCH and TOTM
- Non-PVC products like Medalist TPE from Teknor Apex

PLASTICIZER TYPE	PLASTICIZER ALTERNATIVE
Non-DEHP	DINP DIDP
Non-Phthalate	DOTP 75% DOTP / 25% ATBC Blend DINCH CITRATE A 4 DOA / Adipate TOTM / Trimellitate Polymeric Soft & Safe (Europe)
Non-PVC	Medalist [®] MD-50000 Series

Get the full story

We've taken our decades of compounding experience, knowledge of the medical device industry, and intimacy with today's regulatory environment to assemble a fact-filled seminar that educates device makers and prepares them to make the critical materials choices that go into a successful design.

If you wish to arrange for us to deliver this seminar live, via the web or in person, get the process started by contacting us in one of the following ways.

Call us: 800-554-9892 and ask for the marketing seminar coordinator

Email us: vinyll@teknorapex.com

Online: www2.teknorapex.com/dehp_replacement_ebook

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