

AGENDA



About Mexichem and the Compounds Business Group



Plasticizers Utilized



PHTHALATE PHTHERAPY



Alternatives, Challenges, Considerations



Mexichem started as a producer of commodities and has evolved into a provider of innovative solutions to address global issues

MEXICHEM Today

Annual revenue of US \$7.2 billion

Sales in more than 100 countries

Operations in 41 countries

Over 22,000 employees

137 production facilities

2 fluorite mines

8 training academies

18 R&D laboratories



SHAPING FUTURE INNOVATION WITH COMPOUND SOLUTIONS

About our Specialty Compounds organization

The Specialty Compounds group operates from five (5) locations



LEOMINSTER



MELTON



DENVER



PINEVILLE



CHINLEY



We offer a broad portfolio of materials to our customers...

PVC compounds

general purpose
regulated FDA, EU
specialty FR

TPE compounds

general purpose
regulated FDA, EU
specialty industrial

LSHF compounds

general purpose
regulated FDA, EU
specialty industrial

TPU compounds

regulated
specialty industrial

CPE, PP compounds

specialty industrial

EVA compounds

regulated

Wire & Cable



Building,
Construction



Industrial



Consumer
Goods



Footwear



Medical



Food &
Beverage



Electrical



Color
Concentrates



Stabilizers



Automotive



... specifically designed for the markets we serve **Mexichem.**

PVC compounds

general purpose
regulated FDA, EU
specialty FR

Our PVC compound portfolio is available with a variety of plasticizer options

Phthalate

Trimellitate

Adipate

Citrate

The variety we offer underlines our commitment to SOLUTIONS

PVC compounds

general purpose
regulated FDA, EU
specialty FR

Phthalate

Phthalate plasticizers continue to be the most popular based on cost and performance

BBP

DEHP

DINP

DBP

DnOP

DIDP

But several have become reportable

Shaping future innovation with specialty compounds that are Purpose-Driven, Future Fit

Phthalate Phtherapy

Over the years, we have progressed in our conversations with customers and internal stakeholders, helping to understand the definitions of the available phthalate plasticizers:

DEHP-free

Phthalate-free

Non-phthalate

Non-ortho phthalate



Shaping future innovation with specialty compounds that are Purpose-Driven, Future Fit



Phthalate PhTherapy

The word PHTHALATE seems to be popping up everywhere. Manufacturers are increasingly alerting us to the absence of phthalates by making declarations on store posters, product packaging and merchandise labels. In our marketplace, there are reporting requirements from the EU/US toy industries, RoHS, REACH and Prop 65. We provide this information on our Safety Data Sheets (SDS) and we work hard to stay current with ever-evolving industry standards.

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Specialty Compounds

What are PHTHALATES?

Phthalates are substances (also called plasticizers) added to plastics to increase their flexibility. Phthalates are used in hundreds of products from garden hoses and vinyl flooring to medical tubing and blood-storage containers. You will also find them in personal care products such as soaps and shampoos as well as adhesives, detergents and lubricating oils.

December 2017 status of reporting requirements

EU / US toy industry six (6) restricted phthalates	BBP, DEHP, DINP, DBP, DNOP, DIDP
RoHS restricted phthalates	BBP, DEHP, DBP, DIBP
Relevant REACH restricted phthalates	BBP, DEHP, DBP, DIBP
Prop 65 phthalates requiring labeling	BBP, DEHP, DINP, DBP, DIDP

In the spirit of choosing compounds that comply with regulatory provisions, we are often asked for "DEHP-free" or "non-phthalate" or "phthalate-free" compounds. We have found that these terms are often used interchangeably which can cause confusion. To avoid confusion, here is our transparent NEW terminology:

Old Terminology	NEW Terminology
DEHP-free	Formulated without DEHP
Non-Phthalate	Formulated without BBP, DBP, DEHP, DNOP, DINP, DIDP, DIBP
Phthalate-Free	Formulated without phthalate plasticizers SUPERKLEEN series is formulated with a bio based plasticizer

Over the next few months, our literature and website will be updated to reflect these changes. We are happy to answer any questions and provide further clarification as needed to ensure the products our customers are purchasing address the regulatory standards of their particular marketplace.

Our Manufacturing Sites:

Mexichem Specialty Compounds
Goa, India (2018)
Massachusetts, USA
North Carolina, USA
Leicestershire, UK
Derbyshire, UK

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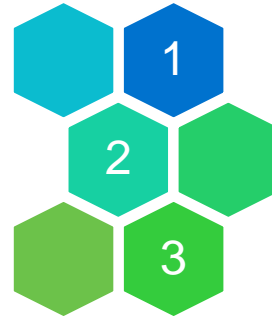
January 2018

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Phthalate Phtherapy

Alternative offerings have included

- 1) Non-reportable phthalate plasticizers
- 2) Plasticizers that are not in the phthalate family
- 3) Compounds that do not contain plasticizer



The challenges our customers face:

- Performance difference, in some cases
- Cost difference
- Specifying requirements

We recognize these challenges to be our opportunity to provide
SOLUTIONS

Shaping future innovation with specialty compounds that are Purpose-Driven, Future Fit

Alternative SOLUTIONS

- Linear phthalates
- Terephthalates
- Trimellitate
- Adipate
- Bio-based



Shaping future innovation with specialty compounds that are Purpose-Driven, Future Fit

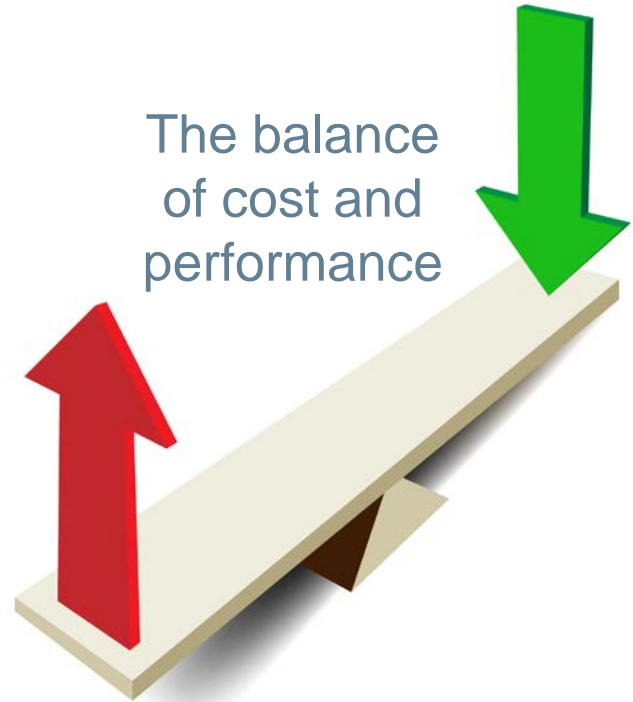
Phthalate Phtherapy

Economic Considerations

Going toward a completely “phthalate-free” system has consequences

As alternatives to ‘traditional’ plasticizers are chosen, costs can significantly increase

Additionally, depending on the application, performance can suffer





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**SHAPING FUTURE
INNOVATION WITH
COMPOUND SOLUTIONS**
That are **PURPOSE-DRIVEN**
and **FUTURE FIT**