

Plasticizers

Evonik product portfolio



C4-CHEMICALS FROM EVONIK: CHEMISTRY4PEOPLE®

PLASTICIZERS FROM EVONIK

Plasticizers from Evonik offer manufacturers of flexible PVC and their products flexibility, safety and above-average technical performance with a consistently high level of quality.

Plasticizers act like a molecular lubricant: The molecules sandwich themselves between the polymer chains of PVC. This makes the originally tightly-packed, rigid structure flexible, allowing the chains to slide past each other.

WE OFFER OUR CUSTOMERS

Maximum delivery reliability

- Verbund production ensures optimal supply
- As a major producer of oxo alcohols continuous production of high-quality plasticizers

A full service from a single source

- Needs-based support from order to delivery
- Support from a well-established team with technical and regulatory knowledge
- Information about new developments

A strong commitment to regulatory issues

- Membership and active participation in several industry associations of the flexible PVC value chain
- Involvement in the public debate surrounding regulatory topics
- Active support of a science-based assessment of chemicals

CONTENTS



VESTINOL® 9 (DINP) is a very effective standard plasticizer for a wide range of flexible PVC applications with the best cost-performance ratio and a very balanced property profile.

[Learn more](#)



ELATUR® CH (DINCH) is a modern, low-viscosity plasticizer with excellent cold flexibility and very good migration properties especially suitable for sensitive applications.

[Learn more](#)



ELATUR® DINCD is an innovative low-viscosity plasticizer with excellent cold flexibility and very low volatility especially suitable for demanding applications.

[Learn more](#)



ELATUR® DPT is a fast fusing, low-viscosity plasticizer with very low SVOC content and high gelation power preferably used for manufacturing of PVC plastisols.

[Learn more](#)



ELATUR® TM is a specialty plasticizer with an excellent migration profile and very low volatility especially suitable for applications where low emissions are needed.

[Learn more](#)

Plasticizers from Evonik ↗

VESTINOL® 9

Efficiency. The allrounder sets the benchmark.

VESTINOL® 9 (DINP) is a very effective standard plasticizer for a wide range of flexible PVC applications with the best cost-performance ratio and a very balanced property profile.

VESTINOL® 9 (DINP)

APPLICATIONS

- Plasticizer for PVC
- Adhesives & Sealants
- Coatings & Paints

SPECIAL OFFERINGS

- Plastisol ready-for-use grade
VESTINOL® 9 cool available
- Life-cycle assessment data available

PERFORMANCE AT A GLANCE

- Excellent plasticizing efficiency
- Very good viscosity and aging profile
- High gelation and fusion speed
- Excellent cold flexibility and outdoor stability
- Very good migration properties

FAST GELATION

OUTDOOR STABILITY

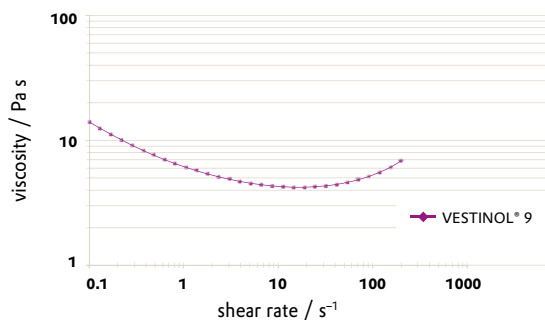
LOW VOLATILITY

HIGH EFFICIENCY

PROCESSING PERFORMANCE

VISCOSITY

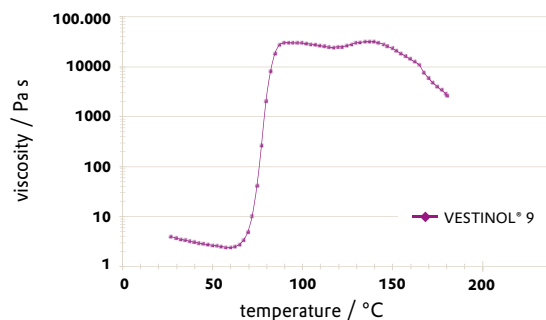
Plastisols with VESTINOL® 9 show a very good viscosity profile.



Measurement device: rheometer, single gap cylinder CC 27
Parameter: viscosity after 24 h
Formulation: 100 phr PVC K70, 50 phr plasticizer, 3 phr ESBO, 2 phr stabilizer

GELATION

VESTINOL® 9 offers a high fusion speed.

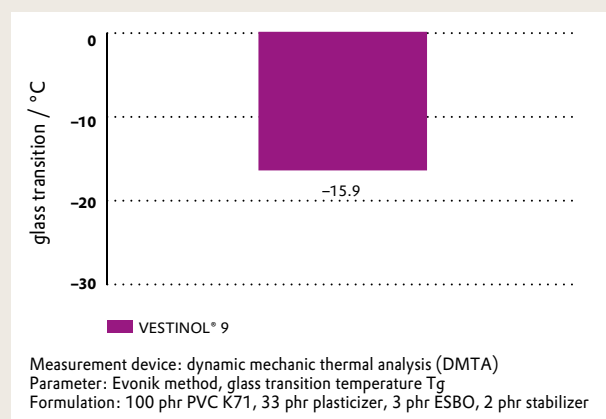


Measurement device: rheometer, plate/plate PP 25
Parameter: complex viscosity after 24 h
Formulation: 100 phr PVC K70, 50 phr plasticizer, 3 phr ESBO, 2 phr stabilizer

TECHNICAL PERFORMANCE

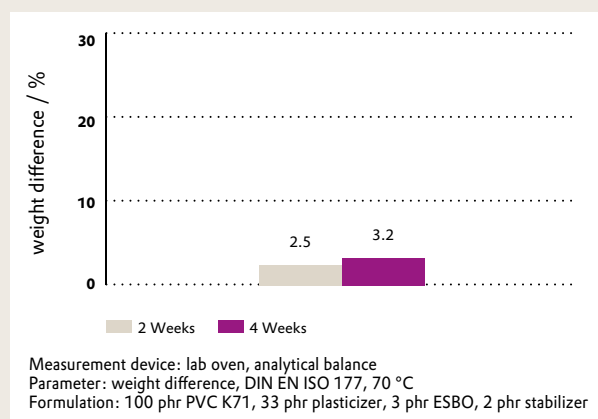
COLD FLEXIBILITY

Products with VESTINOL® 9 show excellent low temperature flexibility.



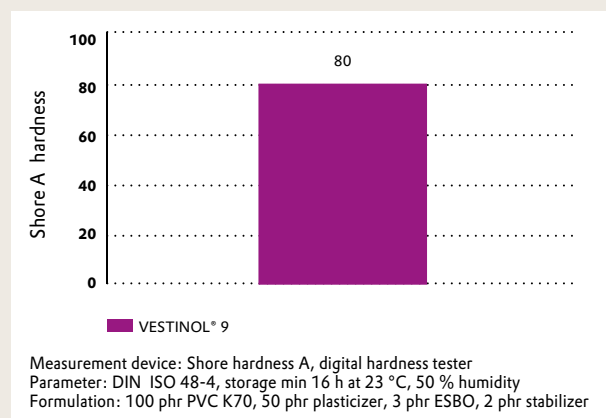
MIGRATION INTO PVC-U

VESTINOL® 9 shows a very low migration tendency into rigid PVC.



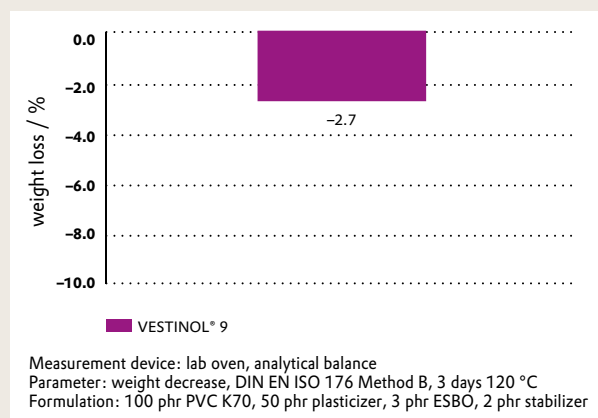
EFFICIENCY

VESTINOL® 9 is a highly efficient plasticizer.



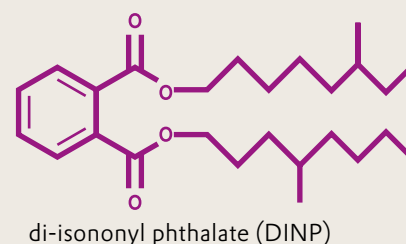
VOLATILITY

Products with VESTINOL® 9 exhibit low emission.



REGULATORY SNAPSHOT

- Excellent safety profile
- Further information in our [regulatory onepager](#)



Disclaimer

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ELATUR® CH

Flexibility. The purpose defines the choice.

ELATUR® CH (DINCH) is a modern, low-viscosity plasticizer with excellent cold flexibility and very good migration properties especially suitable for sensitive applications.

ELATUR® CH (DINCH)

APPLICATIONS

- Plasticizer for PVC
- Adhesives & Sealants
- Coatings & Paints

SPECIAL OFFERINGS

- Special packaging available
- Life-cycle assessment data available

PERFORMANCE AT A GLANCE

- Excellent low viscosity and aging
- Very good migration properties
- Excellent cold flexibility
- High UV stability

LOW VISCOSITY

GOOD COLD FLEXIBILITY

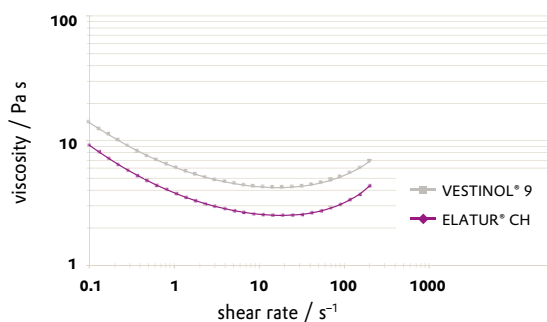
APPLICABLE FOR MEDICAL DEVICES

LOW MIGRATION

PROCESSING PERFORMANCE

VISCOSITY

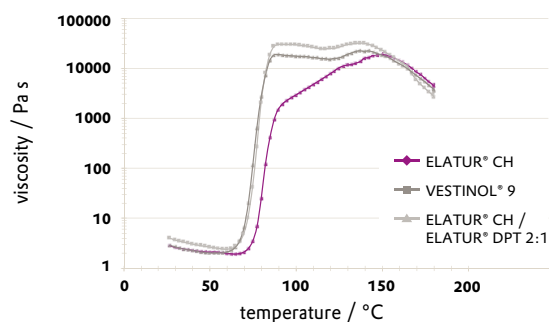
Plastisols with ELATUR® CH show excellent processing viscosity.



Measurement device: rheometer, single gap cylinder CC 27
Parameter: viscosity after 24 h
Formulation: 100 phr PVC K70, 50 phr plasticizer, 3 phr ESBO, 2 phr stabilizer

GELATION

ELATUR® CH exhibits sufficient fusion speed, which can be increased with ELATUR® DPT.

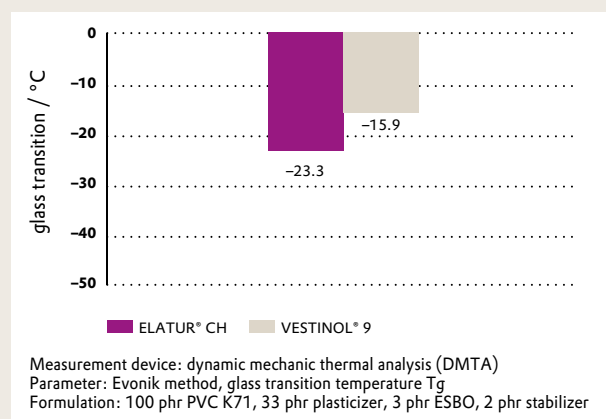


Measurement device: rheometer, plate/plate PP 25
Parameter: complex viscosity after 24 h
Formulation: 100 phr PVC K70, 50 phr plasticizer, 3 phr ESBO, 2 phr stabilizer

TECHNICAL PERFORMANCE

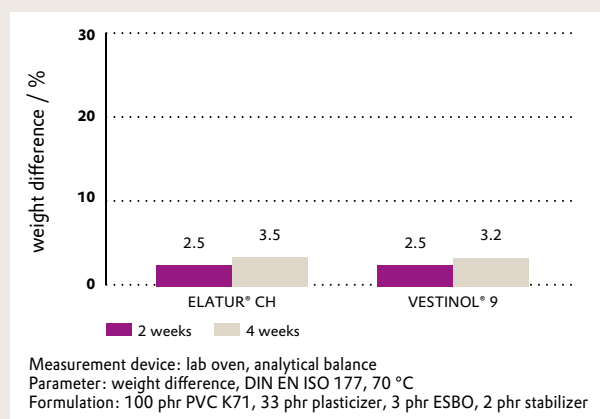
COLD FLEXIBILITY

Products with ELATUR® CH show outstanding low temperature flexibility.



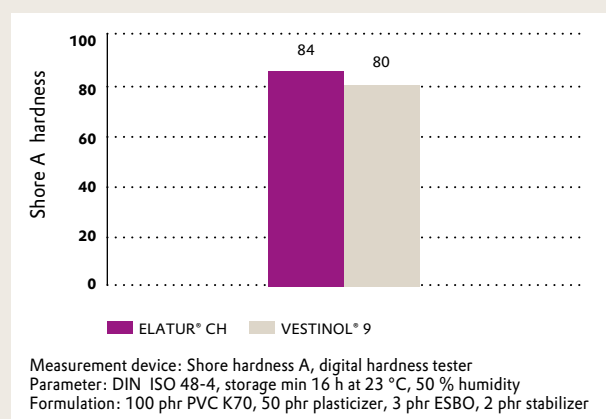
MIGRATION INTO PVC-U

ELATUR® CH shows a very low migration tendency into rigid PVC.



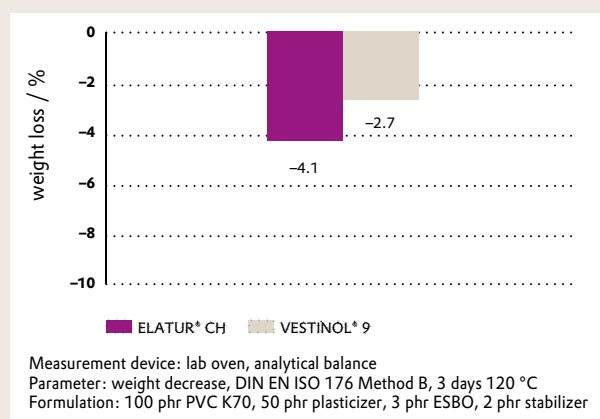
EFFICIENCY

Products with ELATUR® CH show very good plasticizing efficiency.



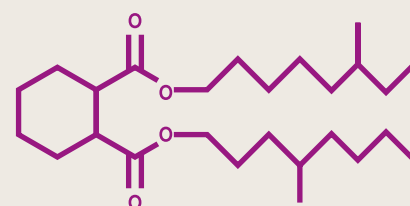
VOLATILITY

ELATUR® CH exhibits a good emission profile.



REGULATORY SNAPSHOT

- Excellent safety profile
- included in European Pharmacopoeia of the European Directorate for the Quality of Medicines & HealthCare (EDQM)



di-isononyl cyclohexanoate (DINCH)

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ELATUR® DPT

Speed. The power makes the difference.

ELATUR® DPT is a fast fusing, low-viscosity plasticizer with very good emission profile and high gelation power preferably used for manufacturing of PVC plastisols.

ELATUR® DPT

APPLICATIONS

- Plasticizer for PVC
- Adhesives & Sealants
- Coatings & Paints

SPECIAL OFFERINGS

- Special packaging available
- Life-cycle assessment data available

PERFORMANCE AT A GLANCE

- Outstanding gelation power and efficiency
- Excellent cold storage properties
- Low viscosity and aging
- High plasticizing efficiency
- Very low SVOC (semi-volatile organic compounds) content

LOW VOLATILITY

GELATION POWER

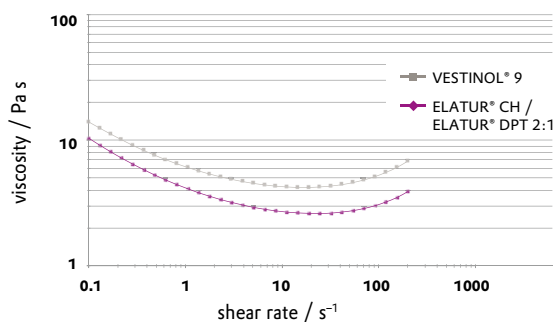
LOW VISCOSITY

COLD STORAGE

PROCESSING PERFORMANCE

VISCOSITY

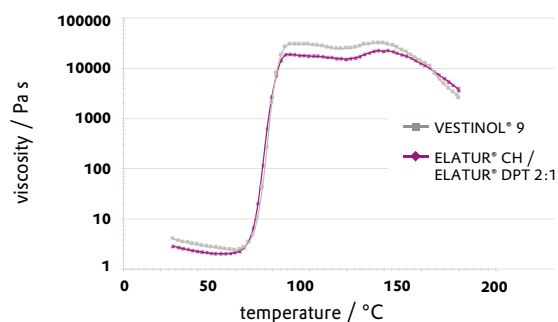
Plastisols with ELATUR® DPT exhibit low viscosity.



Measurement device: rheometer, single gap cylinder CC 27
Parameter: viscosity after 24 h
Formulation: 100 phr PVC K70, 50 phr plasticizer, 3 phr ESBO, 2 phr stabilizer

GELATION

ELATUR® DPT offers a high gelation power, strongly accelerating general purpose plasticizers.

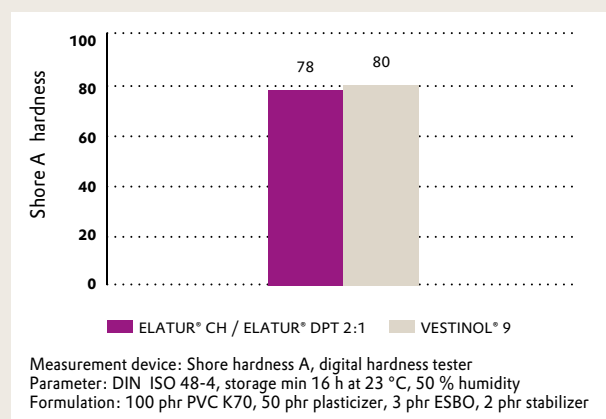


Measurement device: rheometer, plate/plate PP 25
Parameter: complex viscosity after 24 h
Formulation: 100 phr PVC K70, 50 phr plasticizer, 3 phr ESBO, 2 phr stabilizer

TECHNICAL PERFORMANCE

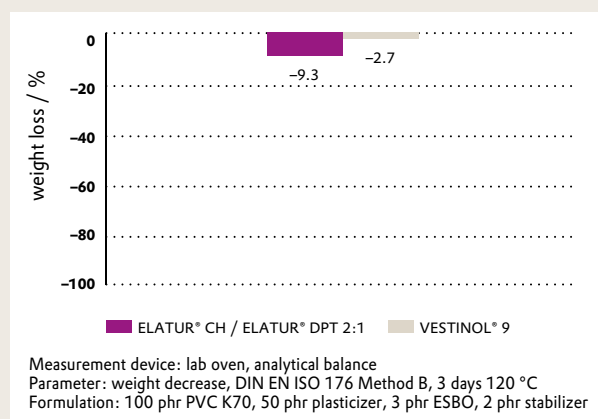
EFFICIENCY

ELATUR® DPT exhibits a very high plasticizing efficiency.



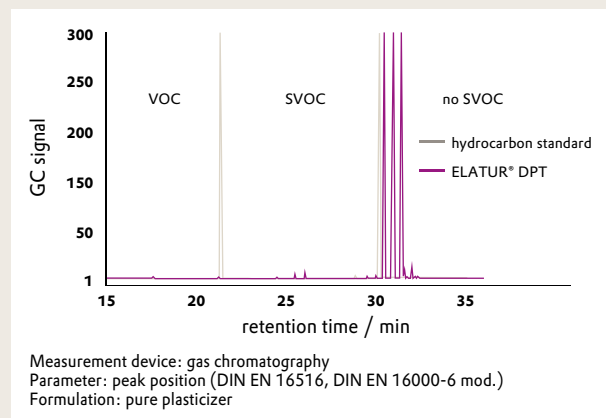
VOLATILITY

ELATUR® DPT is a fast fuser with a balanced emission profile and low SVOC content.



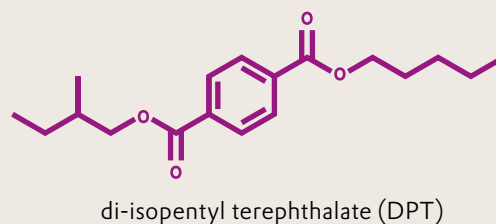
SEMI-VOLATILE ORGANIC COMPOUNDS

ELATUR® DPT contains max. 1 % SVOC.



REGULATORY SNAPSHOT

- Excellent safety profile



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ELATUR® DINCD

Resistance. The toughest for all needs.

ELATUR® DINCD is an innovative low-viscosity plasticizer with excellent cold flexibility and very low volatility especially suitable for demanding applications.

ELATUR® DINCD

APPLICATIONS

- Plasticizer for PVC
- Adhesives & Sealants
- Coatings & Paints

SPECIAL OFFERINGS

- Special packaging available
- Life-cycle assessment data available

PERFORMANCE AT A GLANCE

- Excellent low viscosity and aging
- Low volatility
- Excellent cold flexibility
- High UV stability

LOW VISCOSITY

OUTDOOR STABILITY

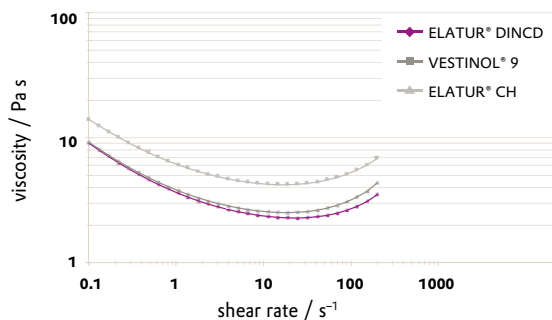
HIGH EFFICIENCY

LOW VOLATILITY

PROCESSING PERFORMANCE

VISCOSITY

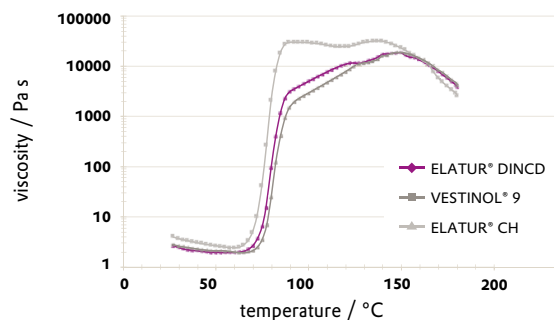
Plastisols with ELATUR® DINCD show excellent processing viscosity.



Measurement device: rheometer, single gap cylinder CC 27
Parameter: viscosity after 24 h
Formulation: 100 phr PVC K70, 50 phr plasticizer, 3 phr ESBO, 2 phr stabilizer

GELATION

ELATUR® DINCD exhibits a good gelation profile.

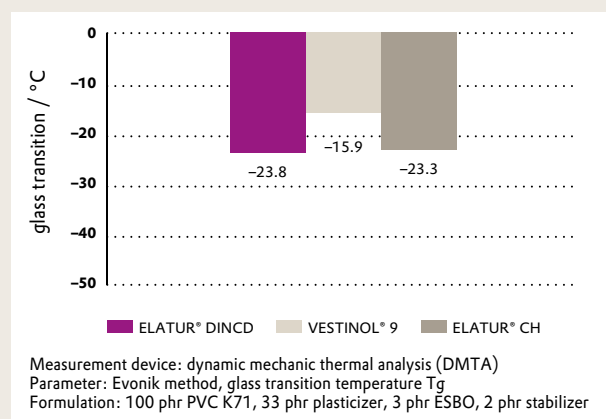


Measurement device: rheometer, plate/plate PP 25
Parameter: complex viscosity after 24 h
Formulation: 100 phr PVC K70, 50 phr plasticizer, 3 phr ESBO, 2 phr stabilizer

TECHNICAL PERFORMANCE

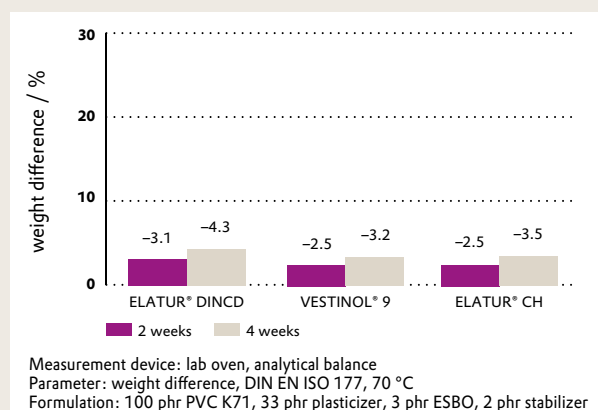
COLD FLEXIBILITY

Products with ELATUR® DINCD show superior low temperature flexibility.



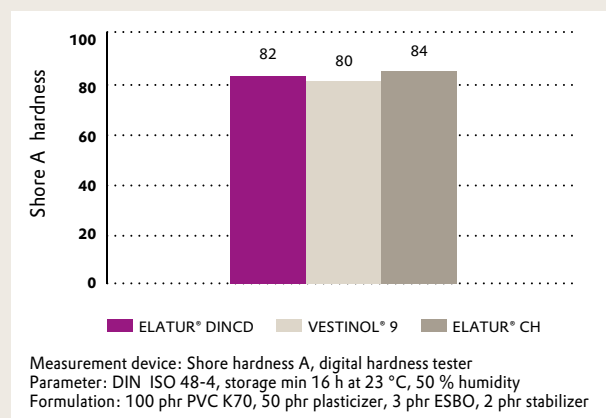
MIGRATION INTO PVC-U

ELATUR® DINCD shows a low migration tendency into rigid PVC.



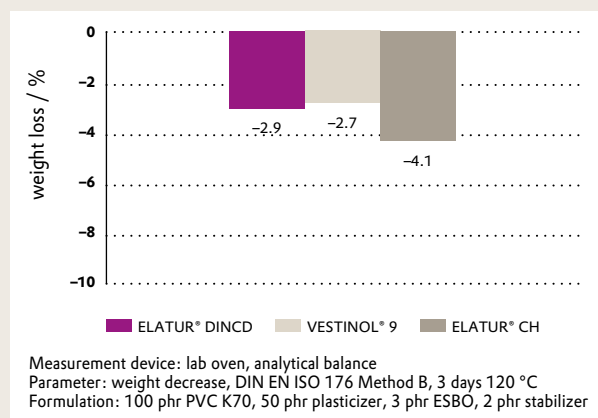
EFFICIENCY

Products with ELATUR® DINCD show high efficiency.



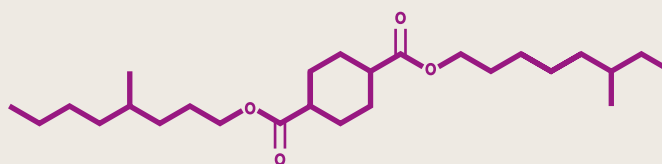
VOLATILITY

ELATUR® DINCD exhibits an excellent emission profile.



REGULATORY SNAPSHOT

- Excellent safety profile



di-isononyl-1,4-cyclohexane dicarboxylate (DINCD)

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ELATUR® TM

Stability. Heat resistance at its perfection.

ELATUR® TM is a specialty plasticizer with an excellent migration profile and very low volatility especially suitable for applications where low emissions are needed.

ELATUR® TM

APPLICATIONS

- Specialty plasticizer for PVC
- Automotive applications, e.g. artificial leather
- High temperature cables

SPECIAL OFFERINGS

- Special packaging available

PERFORMANCE AT A GLANCE

- High temperature resistance
- Extremely low volatility
- Migration Resistance
- Good cold flexibility

HIGH TEMPERATURE RESISTANCE

MIGRATION RESISTANCE

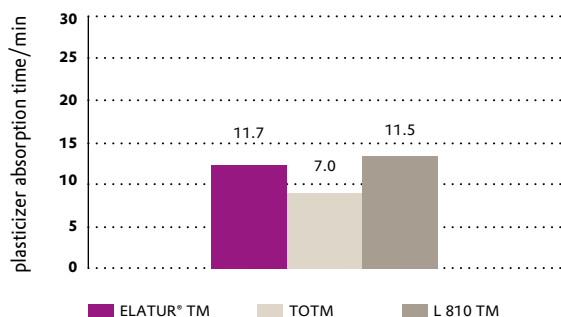
LOW FOGGING

EXTREMELY LOW VOLATILITY

PROCESSING PERFORMANCE

ABSORPTION

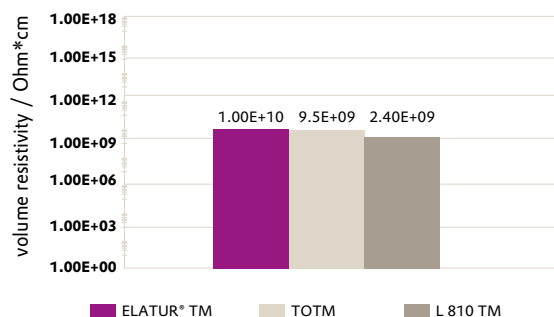
Dryblends with ELATUR® TM show slightly higher plasticizer absorption times due to higher molecular weight of the plasticizer.



Measurement device: planetary mixer
Parameter: absorption time at 88 °C
Formulation: 100 phr PVC K71, 50 phr plasticizer, 20 phr filler, 10 phr stabilizer

ELECTRICAL INSULATION CHARACTERISTICS ACCORDING TO DIN EN 62631-3-1

ELATUR® TM shows very good electrical insulation properties at elevated temperatures.

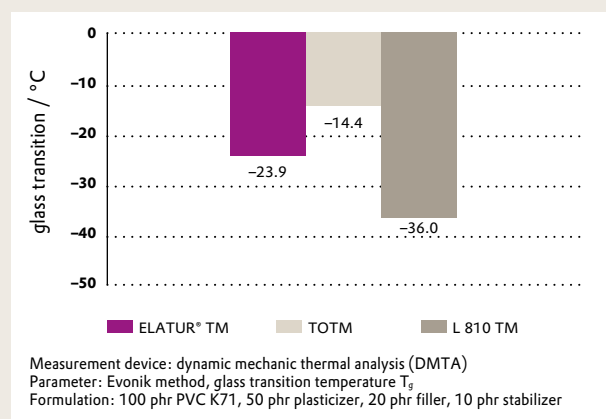


Measurement device: annular electrode out of conductive silver, 49.02 cm²
Parameter: volume resistivity at 70 °C
Formulation: 100 phr PVC K71, 50 phr plasticizer, 20 phr filler, 10 phr stabilizer

TECHNICAL PERFORMANCE

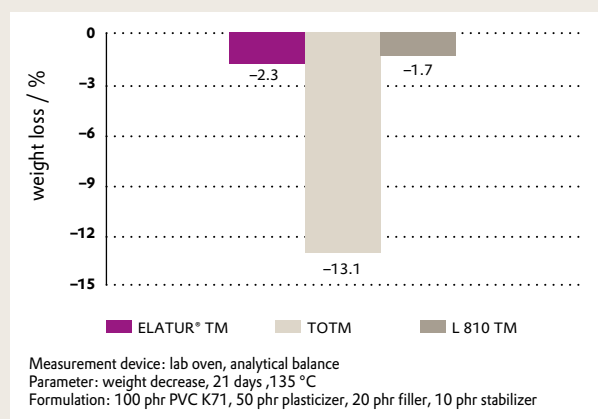
COLD FLEXIBILITY

Products with ELATUR® TM show an improved temperature flexibility.



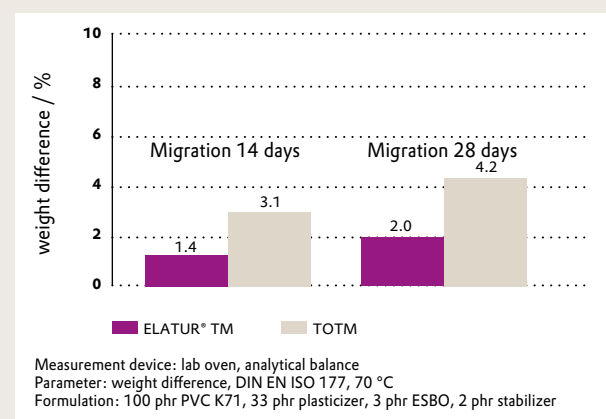
VOLATILITY

ELATUR® TM shows extremely low volatility at high temperatures.



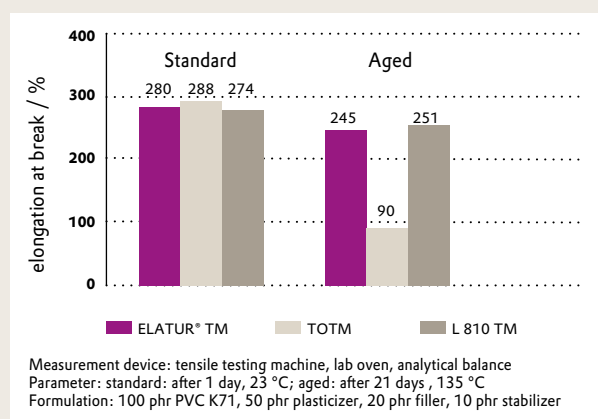
MIGRATION INTO PVC-U

ELATUR® TM shows an improved migration resistance into rigid PVC.



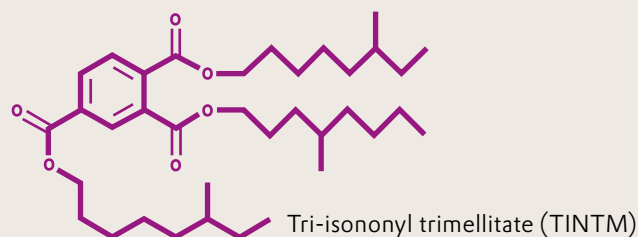
MECHANICAL PROPERTIES

ELATUR® TM shows good mechanical resistance in aged samples at high temperatures.



REGULATORY SNAPSHOT

- Excellent safety profile



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EVONIK OXENO GMBH & CO. KG

Market segment

Oxo Alcohols & Plasticizers

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