Specialty Plasticizer

Oxofine™ DOA

True professional!

Oxoplast™
flexible opportunities

>99,5% DOA Superior Purity

Phthalate Free

EU 10/2011 Compliant

Quality Monomeric

Grupa Azoty

Product Characteristics

Oxofine™ DOA is produced using our high quality 2-EH and adipic acid. It is manufactured according to a proven technology which guarantees its highest quality and production stability.

Oxofine™ DOA can be used as primary or functional plasticizer in combination with other plasticizers. It has a positive effect on finished product properties and its manufacturing process. Oxofine™ DOA is fully compatible with Oxoviflex™.

2-EH + adipic acid = Oxofine™ DOA

Oxofine™ DOA:

- Increased mechanical resistance to operation in low temperature - frost resistance
- Recommended for production of materials intented to come into contact with food, including in particular PVC cling films.
- Compatible with Oxoviflex™ and other plasticizers

Applications

Oxofine™ DOA is primarily recommended for PVC films and artificial leather manufacturing. Key applications:

PVC films

coated fabrics

plasticization of nitrocellulose

paints and varnishes

cosmetic products

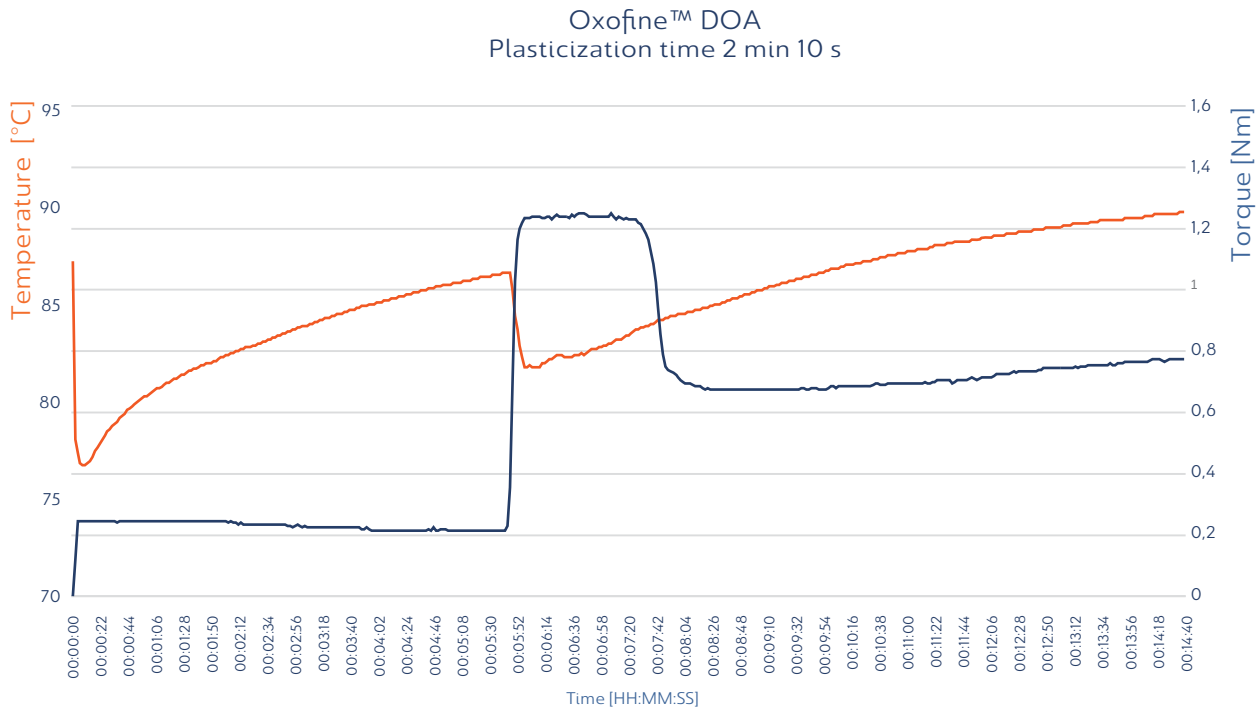
Oxoplast™
flexible opportunities

Application tests

Our products undergo thorough application tests in our advanced and fully equipped **Laboratory of Research and Innovation Department**, in which we test plasticizer performance in polymer processing.

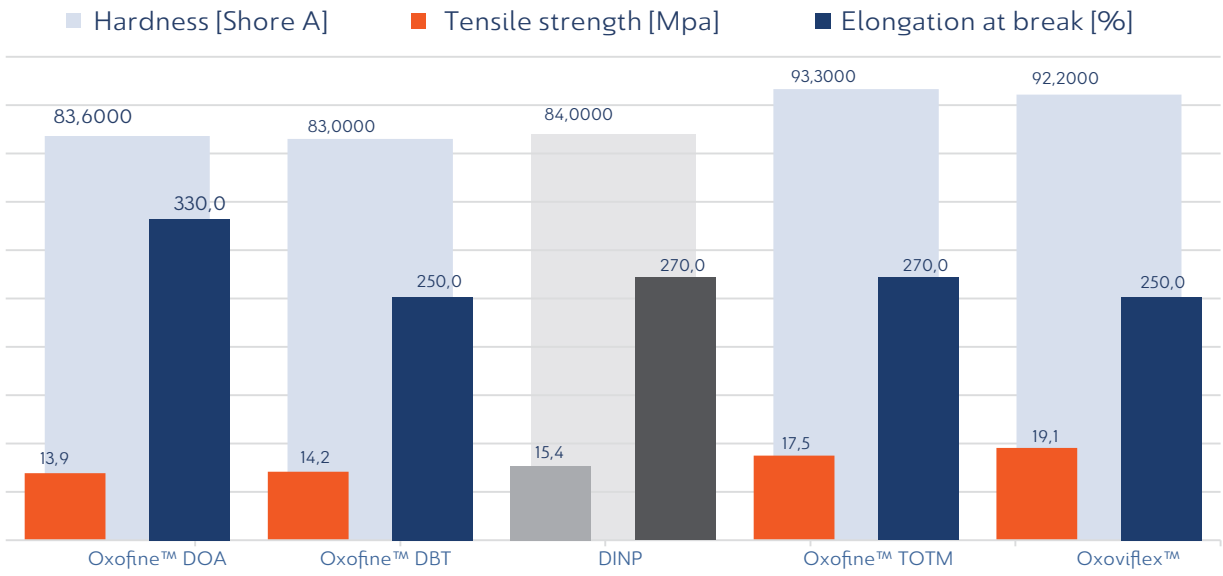
Plasticization time

Oxofine™ DOA is a high solvating plasticizer providing high efficiency of PVC processing. It has short plasticization time enhancing PVC gelation and DRY BLENDS production.



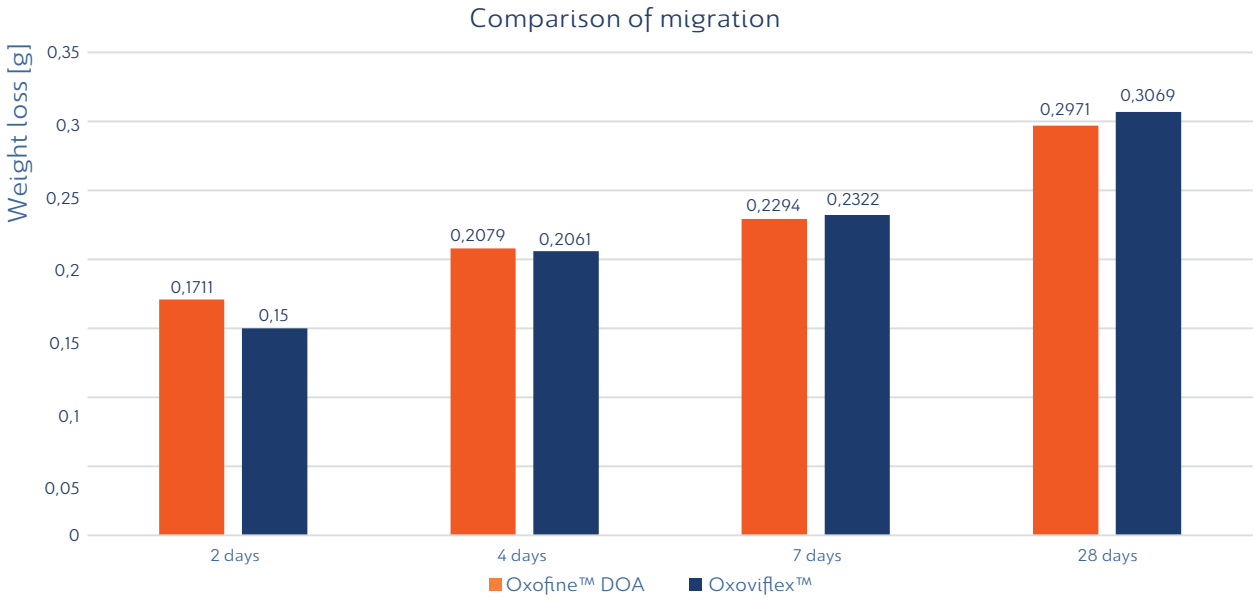
Strength parameters - Hardness

Oxofine™ DOA provides superior softness, high elongation at break and low maximum breaking stress. Products manufactured with Oxofine™ DOA have the highest flexibility compared to other tested plasticizers.



Migration

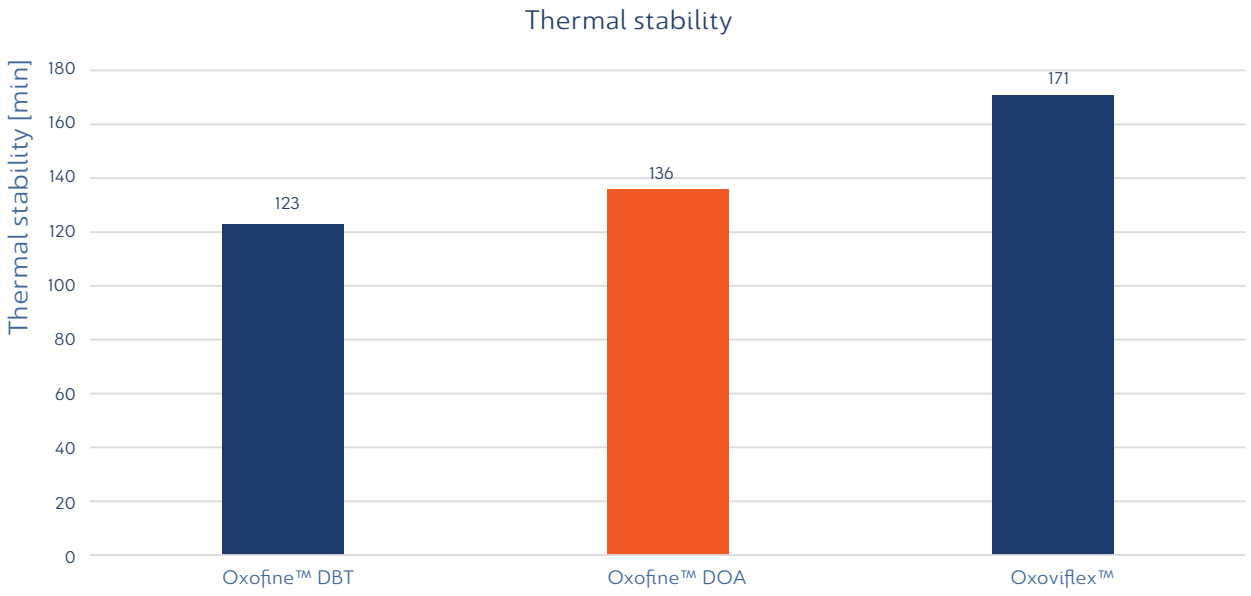
Oxofine™ DOA maintains industry standard for DOA and has nearly the same values as Oxoviflex™.



Oxoplast™
flexible opportunities

Thermal stability

Oxofine™ DOA has good thermal stability and provides high temperature resistance.



Employing Oxofine™ DOA as the primary or functional plasticizer provides superior flexibility to the finished product.

Specification

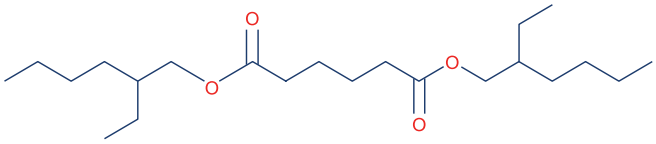
Physical and chemical proprieties

Item	Parameter		Value	Unit	Test method	Foreign equivalent
1	Colour	max.	20	[Pt-Co]	PN-EN ISO 6271:2016-01 PN-C-04534-01:1981	EN ISO 6271 ISO 2211
2	Flash point	min.	195	[°C]	PN-EN ISO 2592:2017-10	ISO 2592
3	Ester content	min.	99.5	[wt %]	GC (% by area)	GC (% by area)
4	Density at 20°C	min. max.	0.924 0.926	[g/cm^3]	PN-EN ISO 12185:2002 PN-C-04004:1990	ISO 12185 DIN 51757
5	Acid value	max.	0.1	[mg KOH/g]	PN-C-89401:1988	DIN 53402/90 ASTM 1045-14
6	Water content	max.	0.1	[wt %]	PN-C-04959:1981 PN-ISO 760:2001	ISO 760 DIN 51777

Oxoplast™
flexible opportunities

Regulatory information

Oxofine™ DOA is oily liquid, colourless or light straw-coloured, containing no mechanical impurities. Oxofine™ DOA is REACH registered pursuant to Regulation (EC) No. 1907/2006. It is not subject to authorisation, legal and application restrictions and is not CLP classified.

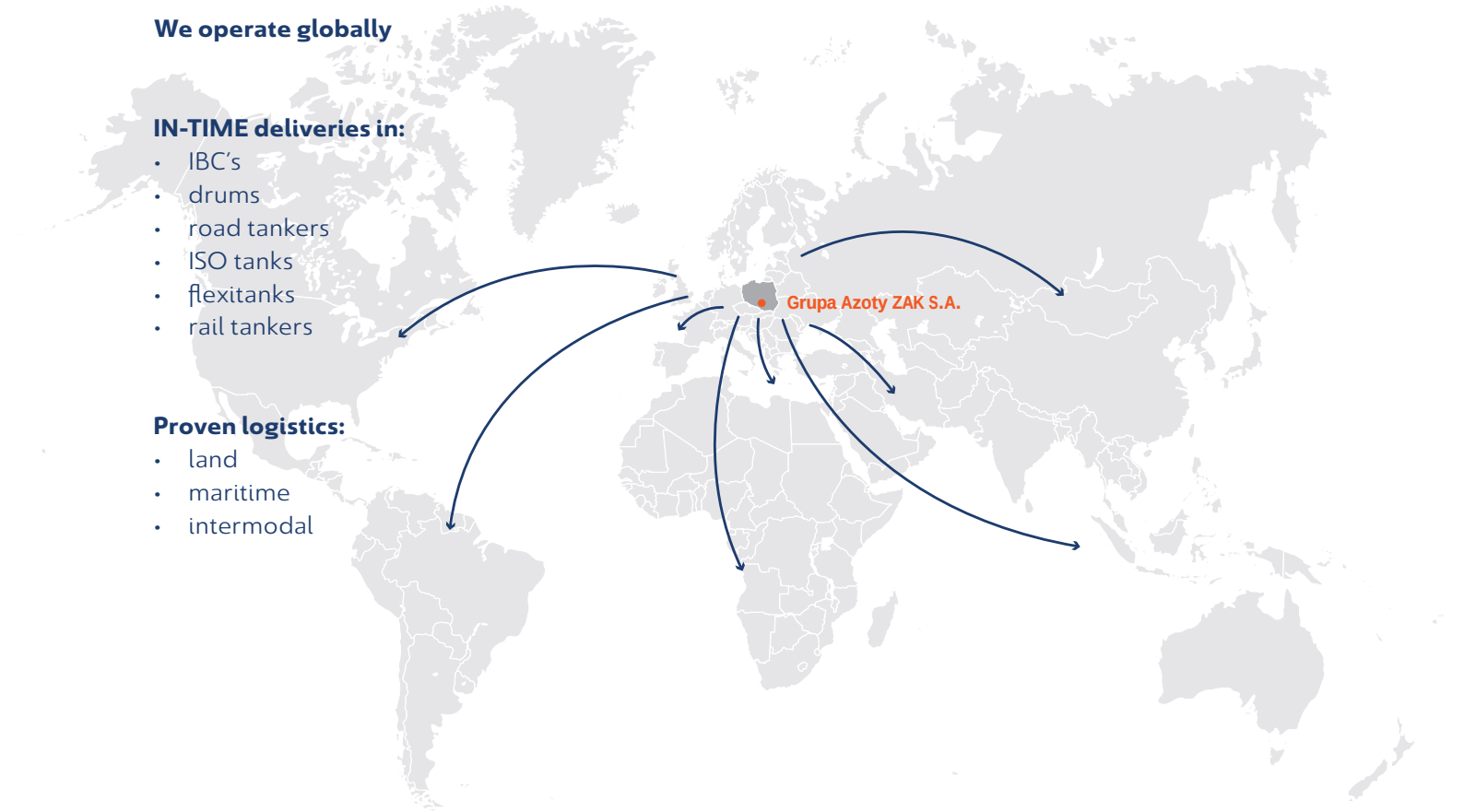
Commercial name:	Oxofine™ DOA
Chemical name:	Bis(2-ethylhexyl) adipate
CN:	2917 12 00 90
CAS:	103-23-1
Polish Classification of Goods and Services (PCGS):	20.14.33.0
Structural formula:	

Sales and logistics:

We operate globally

IN-TIME deliveries in:

- IBC's
- drums
- road tankers
- ISO tanks
- flexitanks
- rail tankers



Proven logistics:

- land
- maritime
- intermodal

Oxoplast™
flexible opportunities

Customer support and product development

We provide technical and application support for all our plasticizers. We have well-qualified technical staff and the **Laboratory of Research and Innovation Department** equipped in the top quality and technically advanced equipped with the top, in which we conduct:

- Processing tests for:
  - DRY BLENDS processing parameters
  - Moulding parameters
- Laboratory tests:
  - Plasticization time
  - Shore Hardness
  - Strength parameters (tensile strength, elongation at break)
  - Thermal stability
  - Migration
  - Chemical resistance
  - GMC analysis
- Developing optimum processing formulations for industrial applications

We have also launched a semi-scale plasticizer (ester) production plant, on which our experienced technology engineers develop products with specific properties tailored to the individual needs and optimise the production technology.

The semi-scale enables production and synthesis of plasticizers and esters with specific properties in the tank and ion-exchange reactors.

In addition, we can conduct following processes:
- neutralization
- washing
- rectification
- drying with steam and nitrogen under reduced pressure.

We also cooperate with the scientific and research institutions, knowledge and experience of which supports our in-house competences and promotes development.

Contact

Grupa Azoty ZAK S.A.
ul. Mostowa 30 A
47-220 Kędzierzyn-Koźle
phone: +48 77 481 20 00
e-mail: oxoplast@grupaazoty.com

Oxoplast Business Unit
Commercial Director
Anna Gruszczyńska
phone: +48 77 481 25 53
e-mail: anna.gruszczynska@grupaazoty.com

Western Europe
Agnieszka Ciba
phone: +48 77 481 38 06
e-mail: agnieszka.ciba@grupaazoty.com

Poland
Jolanta Kamys
phone: +48 77 481 35 18
e-mail: jolanta.kamys@grupaazoty.com

Southern Europe, Asia, Africa
Katarzyna Łukasik
phone: +48 77 481 37 44
e-mail: katarzyna.lukasik@grupaazoty.com

North and South America
Sonia Droszczak
phone: +48 77 481 20 21
e-mail: sonia.droszczak@grupaazoty.com

Oxoplast™
flexible opportunities

Sales Representative
North America
Paweł (Paul) Bozek
phone: +1 905 980 0414
e-mail: pawel.bozek@grupaazoty.com

Purchasing Manager
Strategic Raw Materials
Anna Frankiewicz
phone: +48 77 481 21 90
e-mail: anna.frankiewicz@grupaazoty.com

Grupa Azoty ZAK S.A.
Mostowa 30A
47-220 Kędzierzyn-Koźle
Poland
Phone: +48 77 481 20 00
oxoplast@grupaazoty.com

www.oxoplast.com

10/2023