

Oxoplast Medica®

Specification

1. PRODUCT NAME

a/ trade name

in Polish
 in English
 in German
 Oxoplast Medica®
 Oxoplast Medica®

b/ chemical name

in Polish
 in English
 in German
 proper shipping name
 Ftalan bis(2-etyloheksylu); Ftalan di(2-etyloheksylu)
 Bis(2-ethylhexyl) phthalate; DEHP
 in German
 bis(2-ethylhexyl) phthalat
 not applicable (not regulated by RID/ADR)

c/ proper shipping named/ chemical formula

 $\begin{array}{lll} - & molecular \ formula & & C_{24}H_{38}O_4 \\ - & semi-structural \ formula & & C_6H_4(COOC_8H_{17})_2 \end{array}$

structural formula

$$H_3$$
C CH_3

e/ **PKWiU:** 20.14.34.0 **f/ CN:** 2917 32 00

2. QUALITY REQUIREMENTS

2.1. General requirements

Oxoplast Medica® is an oily liquid, colourless or straw-yellow, with no mechanical impurities.

2.2. Physical-chemical properties

| Item | Specification | | Value | Unit | Test method | Foreign equivalent |
|------|-------------------------------------|--------------|----------------|---------|---|-----------------------|
| 1 | Colour, Pt-Co scale, | max. | 20 | [°Hz] | PN-C-04534-01:1981 | DIN ISO 6271 |
| 2 | Flash point | min. | 206 | [°C] | PN-EN ISO 2592:2008 | ISO 2592 |
| 3 | Volatile matter content (150°C/2 h) | max. | 0.4 | [wt %] | Internal method of Grupa Azoty ZAK S.A. | No equivalent |
| 4 | Di(2-ethylhexyl) phthalate content | min. | 99.5 | [wt %] | Internal method of Grupa Azoty ZAK S.A (GC) | GC |
| 5 | Density at 20°C | min. max. | 0.983 0.986 | [g/cm³] | PN-EN ISO 12185:2002 | ISO 12185 |
| 6 | Free acids as phthalic acid | max. | 0.010 | [wt %] | PN-C-89401:1988 | ISO 1385/IV |
| 7 | Water content | max. | 0.10 | [wt %] | PN-ISO 760:2001 | ISO 760 |



| Item | Specification | | | Value | Unit | Test method | Foreign equivalent |
|------|-----------------------------|------------------------------|--------------------------------------|--------------------------------|-------|--|---|
| 8 | Metals content | Cd Sn Zn Ba Ca | max. max. max. max. max. | 0.1 1.0 10 1.0 1.0 | [ppm] | Internal Method of Grupa Azoty ZAK S.A. (ICP-OES) | No equivalent ICP-OES |
| 9 | Absorbance (220 - 340 nm; v | vater extract S2) | max. | 0.3 | [] | Internal method of Grupa Azoty ZAK S.A according to Ph. Eur. 8th Edition | No equivalent |
| 10 | Reducing substances (water | extract, KMnO ₄) | max. | 2.0 | [ml] | According to Ph. Eur. 8th Edition | According to Ph. Eur. 8th Edition |

APPLICATION(S)

Oxoplast Medica[®] is used as a plasticiser in the processing of plastics, and in the production of paints and lacquers.

4. STORAGE STABILITY

Oxoplast Medica[®] is chemically stable. When the storage and transport conditions as per sections 7 and 8 are observed, the product will maintain its quality parameters as per section 2 over the period of 6 months from the date of its loading.

5. QUALITY DOCUMENT

Unless the client's order (or contract) demands otherwise, each shipment of the product shall be provided with the quality certificate to evidence that the product quality parameters satisfy the requirements listed in the contract and/or in this Specification.

6. PACKING

6.1. General requirements

Oxoplast Medica® is available in bulk shipments, in steel rail tank cars, in tank-containers, in road tankers or flexitanks. Other types of containers are also allowable, if they protect the product sufficiently to maintain its quality, and if they provide safety in transport, storage, handling and use. In that case, the client should:

- Submit the valid certificate which permits the use of that type of containers in storage and transport, or his own statement in writing on the subject.
- Place marking on the containers, in accordance with applicable regulations.

6.2. Labelling applicable for client's unit containers

a/ According to Regulation (EC) № 1272/2008:

Identification data: name, address and phone number of the supplier (or suppliers)

Information on product amount: nominal amount of the product in the packages which are made available to the public,

unless that amount has been specified elsewhere on the package

Product identifier:

Substance name: "Bis(2-ethylhexyl) phthalate"
EC number: "EC number 204-211-0"
CAS number: "CAS number 117-81-7"

Hazard Pictogram:

GHS08: health hazard

Signal Word: "Danger"



Oxoplast Medica®

Hazard statements:

H360FD: "May damage fertility. May damage the unborn child."

Precautionary statements:

P201: "Obtain special instructions before use."

P308+P313: "IF exposed or concerned: Get medical advice/attention."

P405: "Store locked up."

b/ According to RID/ADR:

Not applicable - Oxoplast Medica[®] (bis(2-ethylhexyl) phthalate) is not classified as dangerous by RID/ADR.

c/ Inscription:

"Spent packages must be transferred to an authorised waste collecting company."

d/ Additional labelling required by national/local legislation.

STORAGE

7.1. Requirements for warehouses

- Local exhaust ventilation systems, to eliminate vapours from the places of their emission, and general ventilation systems in rooms.
- Protection against accumulation of static electricity ignition of organic vapours may be initiated by any static discharge.
- Sprinkler systems, to cool down tanks/containers with water spray in case of fire.
- Liquid-impervious floors which make it possible to collect the spilled material and prevent its entry to the sewage system.
- The storage rooms should be cool and dry.

7.2. Storage conditions

- Keep away from ignition sources No smoking.
- Keep container tightly closed, in cool and well ventilated places.
- Handle and open containers with care.
- Containers and tanks must be properly marked.
- Containers and tanks must be made of the materials which are resistant to the product attack.
- Hand-operated/portable fire-fighting equipment should be available in storage rooms.

7.3. Recommendations for occupational hygiene

- Avoid any direct contact with skin, eyes and clothing.
- Avoid inhalation of vapour or mist.
- Do not eat, do not drink and do not smoke when handling the product.
- Wash hands after handling the product.
- Remove contaminated clothing and protective equipment before entering eating areas.

7.4. Recommendations for joint storage

Incompatible substances: strong oxidisers

8. TRANSPORT

8.1. General requirements

Oxoplast Medica® is transported in rail tankers, in road tankers, in tank-containers and/or in flexitanks.

The rail tankers, road tankers and tank-containers must be leak-proof and clean (they need to have washing/cleaning certificates) and their approval documents need to be valid.

The client's unit containers must meet the requirements as per Section 6.

Unit containers should be transported by covered means of transport.

Oxoplast Medica® may not be transported together with strong oxidisers and alkalies.

The product is not a dangerous goods in accordance with RID/ADR.



Oxoplast Medica®

8.2. Labelling applicable for means of transport as per RID/ADR

Not applicable - Oxoplast Medica® (bis(2-ethylhexyl) phthalate) is not classified as dangerous by RID/ADR.

9. OTHER INFORMATION

Oxoplast Medica® is Kosher-certified.

10. REFERENCE DOCUMENTS

Product Sheet PM-020-02 "Oxoplast Medica®. Material Safety Data Sheet."

method

PN-EN ISO 2592:2008 Determination of flash and fire points - Cleveland open cup method.

PN-C-04534-01:1981 Chemical analysis - Determination of colour of chemical products by Hazen units (platinum-cobalt

scale)

PN-ISO 760:2001 Determination of water -- Karl Fischer method (General method)

PN-C-88035:1977 Dioctyl phthalate for industrial use.

PN-C-89401:1988 Plasticizers - Test methods.

European Pharmacopeia monographs 3.1.1.1, 3.1.1.2, 3.1.13, 3.1.14, 3.2.4, 3.2.5 (8th edition 2013)

Classification Certificate No 004/IPO-BC/2014

11. IN PLACE OF

PM-020-01-2.0 "Oxoplast Medica®. Specification."