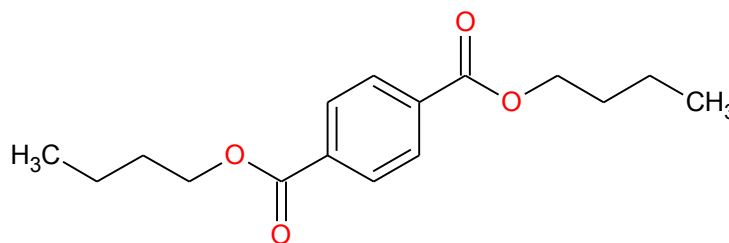


1. PRODUCT NAME

- a/ **trade name**
- in Polish Oxovilen®
 - in English Oxovilen®
 - in German Oxovilen®
- b/ **chemical name**
- in Polish Tereftalan di(n-butylu)
 - in English Dibutyl terephthalate
 - in German Dibutyl terephthalat
- c/ **proper shipping name** not applicable (not regulated by RID/ADR)
- d/ **chemical formula**
- molecular formula $C_{16}H_{22}O_4$
 - semi-structural formula $C_6H_4(C_4H_9)_2$

- structural formula



- e/ **PKWiU:** 20.14.34.0
- f/ **CN:** 2917 39 95

2. QUALITY REQUIREMENTS

2.1. General requirements

Oxovilen® is an oily liquid, colourless or light straw, with no mechanical impurities.

2.2. Physical-chemical properties

Item	Specification	Value	Unit	Test method	Foreign equivalent
1	Colour max.	30	[Pt-Co]	PN-C-04534-01:1981 PN-EN ISO 6271:2016-01	ISO 2211 ISO 6271
2	Flash point min.	190	[°C]	PN-EN ISO 2592:2017-10	ISO 2592
3	Dibutyl terephthalate min.	98.0	[wt %]	Internal method of Grupa Azoty ZAK S.A. (GC, % by area)	GC (% by area)
5	Density at 20°C min. max.	1.043 1.046	[g/cm ³]	PN-EN ISO 12185:2002	ISO 12185
6	Free acids as phthalic acid max.	0.1	[wt %]	PN-C-89401:1988	ISO 1385/IV
7	Water content max.	0.1	[wt %]	PN-EN ISO 12937:2005 PN-ISO 760:2001	ISO 12937 ISO 760

3. APPLICATION(s)

Oxovilen® is used as a plasticiser in the processing of plastics.

4. STORAGE STABILITY

Oxovilen® 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 above over the period of 6 months from the date of 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 this Specification.

6. PACKING

6.1. General requirements

Oxovilen® 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:

- Not applicable - Oxovilen® /dibutyl terephthalate/ is not classified as dangerous by CLP/GHS regulations.

b/ According to RID/ADR:

- Not applicable - Oxovilen® /dibutyl terephthalate/ 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

7. 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.
- 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.
- Wash hands after handling the product.

7.4. Recommendations for joint storage

- Incompatible substances: oxidisers

8. TRANSPORT

8.1. General requirements

Oxovilen® /dibutyl terephthalate/ should be transported in rail tankers, in road tankers, in tank-containers, in flexitanks. The rail tankers, road tankers, tank-containers must be leak-proof, technically serviceable and clean (they need to have valid washing/cleaning certificates).

Client's unit containers which meet the requirements as per Section 6.

Unit containers should be transported by covered means of transport.

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

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

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

Not applicable - Oxovilen® /dibutyl terephthalate/ is not classified as dangerous by RID/ADR.

9. OTHER INFORMATION

None.

10. REFERENCE DOCUMENTS

Product Sheet	"Oxovilen®. Material Safety Data Sheet."
PN-C-04534-01:1981	Chemical analysis - Determination of colour of chemical products by Hazen units (platinum-cobalt scale).
PN-EN ISO 6271:2016-01	Clear liquids -- Estimation of colour by the platinum-cobalt colour scale
PN-EN ISO 2592:2017-10	Petroleum and related products -- Determination of flash and fire points -- Cleveland open cup method
PN-EN ISO 12185:2002	Crude petroleum and petroleum products -- Determination of density -- Oscillating U-tube method.
PN-C-04534-01:1981	Chemical analysis - Determination of colour of chemical products by Hazen units (platinum-cobalt scale).
PN-C-89401:1988	Plasticizers - Test methods.
PN-ISO 760:2001	Determination of water -- Karl Fischer method (General method)

11. IN PLACE OF

PM-025-01-1.0 „Oxovilen. Specification”