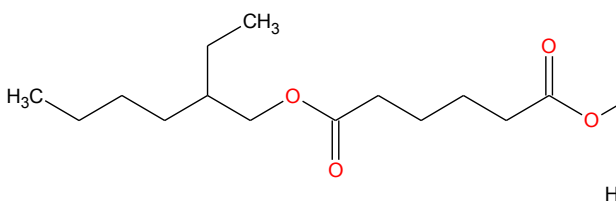


1. PRODUCT NAME

- a/ trade name
- in Polish Adoflex®
 - in English Adoflex®
 - in German Adoflex®
- b/ chemical name
- in Polish adypinian bis(2-etyloheksylu)
 - in English bis(2-ethylhexyl) adipate
 - in German bis(2-ethylhexyl) adipat
- c/ proper shipping name not applicable (not regulated by RID/ADR)
- d/ chemical formula
- molecular formula $C_{22}H_{42}O_4$
 - semi-structural formula $C_4H_8(COOC_8H_{17})_2$
 - structural formula 
- e/ PKWiU 20.14.33.00
- f/ CN code 2917 12 00 90

2. QUALITY REQUIREMENTS

2.1. General requirements

Adoflex® is an oily liquid, colourless, with no mechanical impurities.

2.2. Physical-chemical properties

Item	Specification	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	bis(2-Ethylhexyl) adipate, 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	ISO 1385/IV DIN 53402/90
6	Water content, max.	0.1	[wt %]	PN-C-04959:1981 PN-ISO 760:2001	ISO 760 DIN 51777

3. APPLICATION(s)

Adoflex® is used as a plasticiser in the processing of plastics, transparent foils, fake leather products.

4. STORAGE STABILITY

Adoflex® 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

Adoflex® 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 - Adoflex® /bis(2-ethylhexyl) adipate/ is not classified as dangerous by CLP/GHS regulations.

b/ According to RID/ADR:

- Not applicable - Adoflex® /bis(2-ethylhexyl) adipate/ 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.
- 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.
- Wash hands after handling the product.

7.4. Recommendations for joint storage

- Incompatible substances: strong oxidisers

8. TRANSPORT

8.1. General requirements

Adoflex® should be transported in rail tankers, in road tankers, in tank-containers, in flexitanks and/or in client's unit containers which meet the requirements as per Section 6.

The rail tankers, road tankers, tank-containers, flexitanks and unit containers must be leak-proof, technically serviceable and clean (they need to have valid washing/cleaning certificates).

Unit containers should be transported by covered means of transport.

Adoflex® 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 - Adoflex® /bis(2-ethylhexyl) adipate/ is not classified as dangerous by RID/ADR.

9. OTHER INFORMATION

Adoflex® is Kosher-certified.

10. REFERENCE DOCUMENTS

Product Sheet PM-024-02 "Adoflex®. Material Safety Data Sheet."

11. IN PLACE OF

PM-024-01-1.0 "Adoflex. Specification."