

**Substance Name: 1,2-benzenedicarboxylic acid
dipentylester, branched and linear**

EC Number: 284-032-2

CAS Number: 84777-06-0

SUPPORT DOCUMENT FOR IDENTIFICATION OF

**1,2-BENZENEDICARBOXYLIC ACID DIPENTYLESTER,
BRANCHED AND LINEAR**

**AS A SUBSTANCE OF VERY HIGH CONCERN BECAUSE OF ITS
CMR¹ PROPERTIES**

¹ CMR means carcinogenic, mutagenic or toxic for reproduction

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Substance Name(s): 1,2-benzenedicarboxylic acid dipentylester, branched and linear

EC Number(s): 284-032-2

CAS number(s): 84777-06-0

The substance is identified as substance meeting the criteria of Article 57 (c) of Regulation (EC) 1907/2006 (REACH) owing to its classification as toxic for reproduction category 1B² which corresponds to classification as toxic for reproduction category 2³.

Summary of how the substance meets the CMR Cat 1B criteria

1,2-benzenedicarboxylic acid dipentylester, branched and linear is listed by Index number 607-426-00-1 of Regulation (EC) No 1272/2008 and classified in Annex VI, Part 3, Table 3.1 (list of harmonised classification and labelling of hazardous substances) as toxic for reproduction, Repr. 1B (H360FD: "May damage fertility. May damage the unborn child."). The corresponding classification in Annex VI, part 3, Table 3.2 (the list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC) of Regulation (EC) No 1272/2008 is toxic for reproduction, Repr. Cat. 2 (R60-61;" May impair fertility. May cause harm to the unborn child").

Therefore, this classification of the substance in Regulation (EC) No 1272/2008 shows that it meets the criteria for classification as toxic for reproduction in accordance with Article 57 (c) of REACH.

Registration dossiers submitted for the substance? No

² Classification in accordance with Regulation (EC) No 1272/2008 Annex VI, part 3, Table 3.1 List of harmonised classification and labelling of hazardous substances, OJ L 353, p.1, 31.12.2008.

³ Classification in accordance with Regulation (EC) No 1272/2008, Annex VI, part 3, Table 3.2 List of harmonised classification and labelling of hazardous substances (from Annex I to Council Directive 67/548/EEC), OJ L 353, p.1, 31.12.2008.

Justification

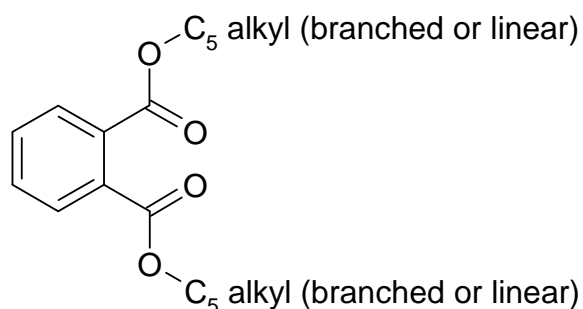
1 Identity of the substance and physical and chemical properties

1.1 Name and other identifiers of the substance

Table 1: Substance identity

EC number:	284-032-2
EC name:	1,2-benzenedicarboxylic acid dipentylester, branched and linear
CAS number (in the EC inventory):	84777-06-0
CAS number:	84777-06-0
CAS name:	1,2-Benzenedicarboxylic acid, dipentyl ester, branched and linear
IUPAC name:	bis-C5-alkyl-(linear and branched)phthalate
Index number in Annex VI of the CLP Regulation	607-426-00-1
Molecular formula:	$C_{18}H_{26}O_4$
Molecular weight range:	306 g/mol
Synonyms:	

Structural formula:



1.2 Composition of the substance

Name: 1,2-benzenedicarboxylic acid, dipentyl ester, branched and linear

Description: UVCB substance

Degree of purity: Registration dossiers or other information on concentration ranges are not available.

Table 2: Constituents

Constituents	Typical concentration	Concentration range	Remarks
1,2-benzenedicarboxylic acid, dipentyl ester, branched and linear 284-032-2			

Table 3: Impurities

Impurities	Typical concentration	Concentration range	Remarks

Table 4: Additives

Additives	Typical concentration	Concentration range	Remarks

1.3 Physico-chemical properties

Table 5: Overview of physicochemical properties

Property	Value	Remarks
Physical state at 20°C and 101.3 kPa		
Melting/freezing point		
Boiling point		
Vapour pressure		
Water solubility		
Partition coefficient n-octanol/water (log value)		
Dissociation constant		
[enter other property, if relevant, or delete row]		

No physical and chemical properties could be found in well known databases (e.g. the recommend databases of Guidance on information requirements and chemical safety assessment Chapter R.7a: Endpoint specific guidance). Furthermore no registration dossiers are available. Hence no physical and chemical properties could be given.

2 Harmonised classification and labelling

1,2-benzenedicarboxylic acid dipentylester, branched and linear is listed by Index number 607-426-00-1 of Regulation (EC) No 1272/2008 and classified in Annex VI, Part 3, Table 3.1 (list of harmonised classification and labelling of hazardous substances) as follows:

Table 6: Classification according to Annex VI, Part 3, Table 3.1 (list of harmonised classification and labelling of hazardous substances) of Regulation (EC) No 1272/2008

Index No	International Chemical Identification	EC No	CAS No	Classification		Labelling	
				Hazard Class and Category Code(s)	Hazard statement code(s)	Pictogram, Signal Word Code(s)	Hazard statement code(s)
607-426-00-1	1,2-benzene-dicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0	Repr. 1B Aquatic Acute 1	H360FD H400	GHS08 GHS09 Dgr	H360FD H400

1,2-benzenedicarboxylic acid, dipentylester, branched and linear is covered by Index number 607-426-00-1 in Regulation (EC) No 1272/2008, Annex VI, Part 3, Table 3.2 (list of harmonised classification and labelling of hazardous substances from Annex I to Council Directive 67/548/EEC) as follows:

Table 7: Classification according to Annex VI, Part 3, Table 3.2 (list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC) of Regulation (EC) No 1272/2008

Index No	Chemical Name	EC No	CAS No	Classification	Labelling
607-426-00-1	1,2-benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0	Repr. Cat. 2; R60-61 N; R50	T; N R: 60-61-50 S: 53-45-61

3 Environmental fate properties

Not relevant.

4 Human health hazard assessment

See section 2 on Harmonised Classification and Labelling.

5 Environmental hazard assessment

Not relevant.

6 Conclusions on the SVHC Properties

6.1 PBT, vPvB assessment

Not relevant.

6.2 CMR assessment

1,2-benzenedicarboxylic acid dipentylester, branched and linear is covered by Index number 607-426-00-1 of Regulation (EC) No 1272/2008 and classified in Annex VI, Part 3, Table 3.1 (list of harmonised classification and labelling of hazardous substances) as toxic for reproduction, Repr. 1B (H360FD: "May damage fertility. May damage the unborn child."). The corresponding classification in Annex VI, part 3, Table 3.2 (the list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC) of Regulation (EC) No 1272/2008 is toxic for reproduction, Repr. Cat. 2 (R60-61;" May impair fertility. May cause harm to the unborn child").

Therefore, this classification of the substance in Regulation (EC) No 1272/2008 shows that it meets the criteria for classification as toxic for reproduction in accordance with Article 57 (c) of REACH.

6.3 Substances of equivalent level of concern assessment.

Not relevant.

7 REFERENCES

REACH. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=oj:l:2006:396:0001:0849:en:pdf>

EU, 2008. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>