

Substance Name: Nitrobenzene

EC Number: 202-716-0

CAS Number: 98-95-3

SUPPORT DOCUMENT FOR IDENTIFICATION OF

NITROBENZENE

AS A SUBSTANCE OF VERY HIGH CONCERN BECAUSE OF ITS TOXIC FOR REPRODUCTION (ARTICLE 57C) PROPERTIES

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IDENTIFICATION OF A SUBSTANCE OF VERY HIGH CONCERN ON THE BASIS OF THE CRITERIA SET OUT IN REACH ARTICLE 57

Substance Name(s): Nitrobenzene

EC Number(s): 202-716-0
CAS number(s): 98-95-3

• The substance is identified as a substance meeting the criteria of Article 57 (c) of Regulation (EC) No 1907/2006 (REACH) owing to its classification in the hazard class reproductive toxicity category 1B (H360F 'May damage fertility').

Summary of how the substance meets the criteria set out in Article 57 of the REACH Regulation

Nitrobenzene is covered by index number 609-003-00-7 of Regulation (EC) No 1272/2008 in Annex VI, part 3, Table 3.1 (the list of harmonised classification and labelling of hazardous substances) and it is classified in the hazard class reproductive toxicity category 1B (H360F 'May damage fertility').

Therefore, this classification of the substance in Regulation (EC) No 1272/2008 shows that it meets the criteria for classification in the hazard class:

Reproductive toxicity category 1B in accordance with Article 57 (c) of REACH.

Registration dossiers submitted for the substance? Yes

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:	202-716-0
EC name:	nitrobenzene
CAS number (in the EC inventory):	98-95-3
CAS number: Deleted CAS numbers:	98-95-3
CAS name:	Benzene, nitro-
IUPAC name:	nitrobenzene
Index number in Annex VI of the CLP Regulation	609-003-00-7
Molecular formula:	C ₆ H ₅ NO ₂
Molecular weight range:	123.11
Synonyms:	Nitrobenzol, mirbane oil, essence of mirbane, p- Nitrobenzene, Mononitrobenzene

Structural formula:

1.2. Composition of the substance

Name: Nitrobenzene

Description: colourless to yellow, oily liquid with a pungent odour.

Substance type: mono-constituent

Table 2: Constituents

Constituents	Typical concentration	Concentration range	Remarks
Nitrobenzene	≥80 - 100% (w/w)	≥80 - 100% (w/w)	
EC 202-716-0			

1.3. Identity and composition of degradation products/metabolites relevant for the SVHC assessment

Not relevant for the identification of the substance as SVHC in accordance with Article 57 points (a) to (c).

1.4. Identity and composition of structurally related substances (used in a grouping or read-across approach)

Not relevant for the identification of the substance as SVHC in accordance with Article 57 points (a) to (c).

1.5. Physicochemical properties

Not relevant for the identification of the substance as SVHC in accordance with Article 57 points (a) to (c).

2. Harmonised classification and labelling

Nitrobenzene is covered by Index number 609-003-00-7 in part 3 of Annex VI to the CLP Regulation as follows:

Table 3: Classification according to Annex VI, Table 3.1 (list of harmonised classification and labelling of hazardous substances) of Regulation (EC) No 1272/2008 amended by 944/2013/EC (5th ATP).

Index Internation EC No CA		CAS No	AS No Classification		Labelling			Spec.		
No al Chemical Identificati on			Hazard Class and Category Code(s)	Hazard statement code(s)	Pictogra m, Signal Word Code(s)	Hazard statement code(s)	Suppl. Hazard statement code(s)	Conc. Limits , M- factor s	Notes	
609-003- 00-7	nitrobenzene	202- 716-0		Repr. 1B Acute Tox. 3 Acute Tox. 3 Acute Tox. 3	H311	GHS06 GHS08 Dgr	H351 H360F H301 H311 H331 H372 (blood) H412			

The amended classification for nitrobenzene introduced with Reg (EC) 944/2013 (5^{th} ATP to Regulation (EC) 1272/2008) applies from 1^{st} of January 2015. An extract of the corresponding RAC opinion¹ is given in Annex I.

3. Environmental fate properties

Not relevant for the identification of the substance as SVHC in accordance with Article 57 points (a) to (c) REACH.

4. Human health hazard assessment

Not relevant for the identification of the substance as SVHC in accordance with Article 57 points (a) to (c) REACH.

5. Environmental hazard assessment

Not relevant for the identification of the substance as SVHC in accordance with Article 57 points (a) to (c) REACH.

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¹ http://echa.europa.eu/documents/10162/58b183f8-3178-4a37-a4fe-68385af2cbf8.

6. Conclusions on the SVHC Properties

6.1. CMR assessment

Nitrobenzene is covered by index number 609-003-00-7 of Regulation (EC) No 1272/2008 in Annex VI, part 3, Table 3.1 (the list of harmonised classification and labelling of hazardous substances) and it is classified in the hazard class reproductive toxicity category 1B (H360F 'May damage fertility').

Therefore, this classification of the substance in Regulation (EC) No 1272/2008 shows that it meets the criteria for classification in the hazard class:

• Reproductive toxicity category 1B in accordance with Article 57 (c) of REACH.

6.2. PBT and vPvB assessment

Not relevant

6.3. Equivalent level of concern assessment

Not relevant