



Substance name: 1,2,3-trichloropropane
EC number: 202-486-1
CAS number: 96-18-4

MEMBER STATE COMMITTEE
SUPPORT DOCUMENT FOR IDENTIFICATION OF
1,2,3-TRICHLOROPROPANE

AS A SUBSTANCE OF VERY HIGH CONCERN BECAUSE OF ITS
CMR PROPERTIES

Adopted on 20 May 2011

CONTENTS

1	IDENTITY OF THE SUBSTANCE AND PHYSICAL AND CHEMICAL PROPERTIES	3
1.1	Name and other identifiers of the substance	3
1.2	Composition of the substance	4
1.3	Physico-chemical properties	5
2	HARMONISED CLASSIFICATION AND LABELLING	6
3	ENVIRONMENTAL FATE PROPERTIES	7
4	HUMAN HEALTH HAZARD ASSESSMENT	7
5	ENVIRONMENTAL HAZARD ASSESSMENT	7
6	CONCLUSIONS ON THE SVHC PROPERTIES	8
6.1	PBT, vPvB assessment	8
6.2	CMR assessment	8
6.3	Substances of equivalent level of concern assessment	8

Abbreviations:

PBT = Persistent, Bioaccumulative and Toxic
vPvB = very Persistent and very Bioaccumulative
CMR = Carcinogenic, mutagenic or toxic for reproduction

Substance Name: 1,2,3-trichloropropane

EC Number: 202-486-1

CAS number: 96-18-4

- The substance is identified as substance meeting the criteria of Article 57 (a) of Regulation (EC) 1907/2006 (REACH) owing to its classification as carcinogen category 1B¹ which corresponds to classification as carcinogen category 2².
- 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 1B¹ which corresponds to classification as toxic for reproduction category 2².

Summary of how the substance(s) meet(s) the CMR (1A or 1B) criteria

1,2,3-trichloropropane is listed by Index number 602-062-00-X in 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 carcinogen, Carc. 1B (H350: “May cause cancer.”) and toxic for reproduction, Repr. 1B (H360F: “May damage fertility.”). 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 carcinogen category 2 (R45: “May cause cancer.”) and toxic for reproduction category 2 (R60: “May impair fertility.”).

Therefore, this classification of 1,2,3-trichloropropane in Regulation (EC) No 1272/2008 shows that the substance meets the criteria for classification as carcinogen and toxic for reproduction in accordance with Article 57 (a) and Article 57 (c) of REACH.

Registration dossiers submitted for the substance? Yes

¹ 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.

² 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).

JUSTIFICATION

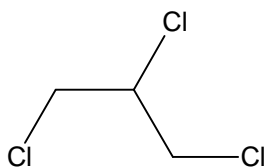
1 IDENTITY OF THE SUBSTANCE AND PHYSICAL AND CHEMICAL PROPERTIES

1.1 Name and other identifiers of the substance

Table 1: Substance identity

EC number:	202-486-1
EC name:	1,2,3-trichloropropane
CAS number (in the EC inventory):	96-18-4
CAS number:	96-18-4
CAS name:	Propane, 1,2,3-trichloro-
IUPAC name:	1,2,3-Trichloropropane
Index number in Annex VI of the CLP Regulation	602-062-00-X
Molecular formula:	C ₃ H ₅ Cl ₃
Molecular weight range:	147.4 g mol ⁻¹
Synonyms:	Allyl trichloride; Glycerol trichlorohydrin; Glyceryl trichlorohydrin; NSC 35403; Trichlorohydrin;

Structural formula:



1.2 Composition of the substance

Name: 1,2,3-Trichloropropane

Description: ---

Degree of purity: 83 – 100 % (w/w)

Table 2: Constituents

Constituents	Typical concentration	Concentration range	Remarks
1,2,3-Trichloropropane EC number: 202-486-1	≥ 86 % (w/w)	83 – 100 % (w/w)	Based on the registration dossiers received so far

1.3 Physico-chemical properties

Table 3: Overview of physicochemical properties

Property	Value	Remarks
Physical state at 20°C and 101.3 kPa	liquid	
Melting/freezing point	-14.7 °C	Lide D.R.; CRC Handbook of Chemistry and Physics. 89th ed.; CRC Press, Taylor & Francis Group, Boca Raton, London, New York, 2008
Boiling point	157 °C at 1013 hPa	Lide D.R.; CRC Handbook of Chemistry and Physics. 89th ed.; CRC Press, Taylor & Francis Group, Boca Raton, London, New York, 2008
Density	1.39 gcm ⁻³ at 20 °C	Lide D.R.; CRC Handbook of Chemistry and Physics. 89th ed.; CRC Press, Taylor & Francis Group, Boca Raton, London, New York, 2008
Vapour pressure (p)	p(37 °C) = 10 hPa p(2 °C) = 1 hPa	Lide D.R.; CRC Handbook of Chemistry and Physics. 89th ed.; CRC Press, Taylor & Francis Group, Boca Raton, London, New York, 2008
Water solubility	1685 mg l ⁻¹ at 25 °C	ECHA, calculation according to EPISUITE performed with the module WSKOWWIN, 2010
Partition coefficient n-octanol/water (log value)	logPow = 2.5	ECHA, calculation according to EPISUITE performed with the module WSKOWWIN, 2010
Surface tension	37.7 mNm ⁻¹ at 20 °C (no information on test concentration)	Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim 10.1002/14356007.a06 233.pub2, 2006
Flash point	74.0 °C (no information on pressure)	Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim 10.1002/14356007.a06 233.pub2, 2006
Autoignition temperature	304 °C (no information on pressure)	Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim 10.1002/14356007.a06 233.pub2, 2006
Oxidizing properties	No oxidizing properties	Due to structural consideration
Explosive properties	No explosive properties	Due to structural consideration

2 HARMONISED CLASSIFICATION AND LABELLING

Table 4: Classification according to part 3 of Annex VI, Table 3.1 (list of harmonised classification and labelling of hazardous substances) of Regulation (EC) No 1272/2008

Index No	International Chemical Identification	Classification		Labelling			Spec. Conc. Limits, M-factors	Notes
		Hazard Class and Category Code(s)	Hazard statement code(s)	Pictogram, Signal Word Code(s)	Hazard statement code(s)	Suppl. Hazard statement code(s)		
602-062-00-X	1,2,3-trichloropropane	Carc. 1B Repr. 1B Acute Tox. 4 * Acute Tox. 4 * Acute Tox. 4 *	H350 H360F *** H332 H312 H302	GHS08 GHS07 Dgr	H350 H360F *** H332 H312 H302			D

Table 5: Classification according to part 3 of Annex VI, Table 3.2 (list of harmonized classification and labelling of hazardous substances from Annex I of Council Directive 67/548/EEC) of Regulation (EC) No 1272/2008

Index No	International Chemical Identification	Classification	Labelling	Concentration Limits	Notes
602-062-00-X	1,2,3-trichloropropane	Carc. Cat. 2; R45 Repr. Cat. 2; R60 Xn; R20/21/22	T R: 45-60-20/21/22 S: 53-45		E D

3 ENVIRONMENTAL FATE PROPERTIES

Not relevant for this dossier.

4 HUMAN HEALTH HAZARD ASSESSMENT

Not relevant for this dossier.

5 ENVIRONMENTAL HAZARD ASSESSMENT

Not relevant for this dossier.

6 CONCLUSIONS ON THE SVHC PROPERTIES

6.1 PBT, vPvB assessment

Not relevant for this dossier.

6.2 CMR assessment

1,2,3-trichloropropane is listed by Index number 602-062-00-X in 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 carcinogen, Carc. 1B (H350: “May cause cancer.”) and toxic for reproduction, Repr. 1B (H360F: “May damage fertility.”). 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 carcinogen category 2 (R45: “May cause cancer.”) and toxic for reproduction category 2 (R60: “May impair fertility.”).

Therefore, this classification of 1,2,3-trichloropropane in Regulation (EC) No 1272/2008 shows that the substance meets the criteria for classification as carcinogen and toxic for reproduction in accordance with Article 57 (a) and Article 57 (c) of REACH.

6.3 Substances of equivalent level of concern assessment

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