

Substance Name: Orthoboric acid, sodium salt

EC Number: 237-560-2

CAS Number: 13840-56-7

SUPPORT DOCUMENT FOR IDENTIFICATION OF

ORTHOBORIC ACID, SODIUM SALT

AS SUBSTANCES OF VERY HIGH CONCERN
BECAUSE OF THEIR TOXIC FOR REPRODUCTION
(ARTICLE 57C) PROPERTIES

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

Substance name: Orthoboric acid, sodium salt

EC number: 237-560-2

CAS number: 13840-56-7

- The substances covered by this (generic) entry are identified as substances meeting the criteria of Article 57 (c) of Regulation (EC) No 1907/2006 (REACH) owing to their classification in the hazard class toxic for reproduction category 1B².

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

Orthoboric acid, sodium salt is covered by index number 005-011-00-4 of Regulation (EC) No 1272/2008 in Annex VI, part 3, Table 3 (the list of harmonised classification and labelling of hazardous substances) and is classified in the hazard class toxic for reproduction category 1B (H360FD¹).

Therefore, the classification of the substances covered by this (generic) entry in Regulation (EC) No 1272/2008 shows that they meet the criteria for classification in the hazard class:

- Toxic for reproduction category 1B in accordance with Article 57 (c) of REACH.

Registration dossiers submitted for the substance? No

¹ H360FD: 'May damage fertility. May damage the unborn child.'

Justification

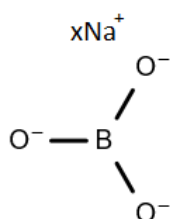
1. Identity of the substances and physical and chemical properties

1.1 Name and other identifiers of the substances

Table 1: Substance identity

EC number:	237-560-2
EC name:	Orthoboric acid, sodium salt
CAS number (in the EC inventory):	13840-56-7
CAS number: Deleted CAS numbers:	13840-56-7
CAS name:	Boric acid (H3BO3), sodium salt (1:?)
IUPAC name:	Orthoboric acid, sodium salt
Index number in Annex VI of the CLP Regulation	005-011-00-4
Molecular formula:	BH3O3.xNa
Molecular weight range:	-
Synonyms:	-

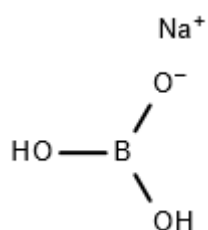
Structural formula:



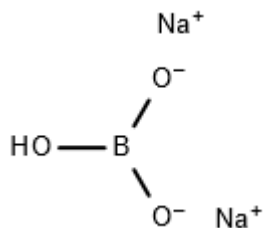
Other identifiers for orthoboric acid, sodium salt as well as identifiers for hydrated forms of the substance are also within the scope of the entry: *e.g.* boric acid, sodium salt, EC 215-604-1, CAS 1333-73-9 (molecular formula BH3O3xNa) and boric acid (H3BO3), sodium salt, hydrate, CAS 25747-83-5 (molecular formula BH3O3.xH2OxNa).

The SVHC entry of orthoboric acid, sodium salt does not specify the exact ratio of sodium ions to borate. Substances with fixed ratios are also covered by this entry: *e.g.* boric acid (H3BO3), sodium salt (1:1), CAS 14890-53-0; boric acid (H3BO3), disodium salt, CAS 22454-04-2, and trisodium orthoborate, EC 238-253-6, CAS 14312-40-4.

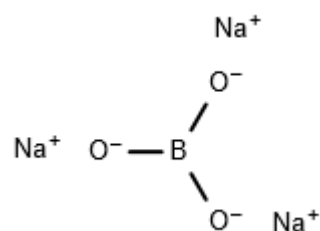
Structural formulas of sodium salts of boric acid with fixed x:



CAS 14890-53-0



CAS 22454-04-2



EC 238-253-6, CAS 14312-40-4

1.2 Composition of the substances

Name: Orthoboric acid, sodium salt

Description: inorganic

Substance type: not specified

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

Not relevant for the identification of the substances as SVHC in accordance with Article 57 (c) of REACH.

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

Not relevant for the identification of the substances as SVHC in accordance with Article 57 (c) of REACH.

1.5 Physicochemical properties

Not relevant for the identification of the substances as SVHC in accordance with Article 57 (c) of REACH.

2. Harmonised classification and labelling

Orthoboric acid, sodium salt is covered by Index number 005-011-00-4 in part 3 of Annex VI to the CLP Regulation as follows:

Table 2: Classification according to Annex VI, Table 3 (list of harmonised classification and labelling of hazardous substances) of Regulation (EC) No 1272/2008

Index No	Chemical name	EC No	CAS No	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)		
005-011-00-4	orthoboric acid, sodium salt	237-560-2	13840-56-7	Repr. 1B	H360FD	GHS08 Dgr	H360FD		Repr. 1B; H360FD : C ≥4,5 %	

3. Environmental fate properties

Not relevant for the identification of the substances as SVHC in accordance with Article 57 (c) of REACH.

4. Human health hazard assessment

Please see Chapter 2 Harmonised classification and labelling.

5. Environmental hazard assessment

Not relevant for the identification of the substances as SVHC in accordance with Article 57 (c) of REACH.

6. Conclusions on the SVHC Properties

6.1 CMR assessment

Orthoboric acid, sodium salt is covered by index number 005-011-00-4 of Regulation (EC) No 1272/2008 in Annex VI, part 3, Table 3 (the list of harmonised classification and labelling of hazardous substances) and is classified in the hazard class toxic for reproduction category 1B (H360FD).

Therefore, the classification of the substances covered by this (generic) entry in Regulation (EC) No 1272/2008 shows that they meet the criteria for classification in the hazard class:

- Toxic for reproduction category 1B in accordance with Article 57 (c) of REACH.

References

- EU (2006). 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. Official Journal of the European Union, L396: 1-849.
- EU (2008). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packing of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Official Journal of the European Union, L353: 1-1355.