



# EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/<sup>13</sup>C, 99%)

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 26/06/2014

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Version: 2.0

ES-5510-CS4

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Mixtures  
Product name : EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/<sup>13</sup>C, 99%)  
Product code : ES-5510-CS4

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Main use category : Professional use  
Industrial/Professional use spec : For professional use only

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810  
USA

USA: 1-800-322-1174 Int: 1-978-749-8000  
[cilsales@isotope.com](mailto:cilsales@isotope.com) [www.isotope.com](http://www.isotope.com)

### Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)  
International: 1-703-741-5970 (24 hours)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225  
Skin Irrit. 2 H315  
Eye Irrit. 2 H319  
Carc. 2 H351  
STOT SE 3 H336  
Repr. 2 H361d

Full text of hazard classes and H-statements : see section 16

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc.Cat.3; R40  
Repr.Cat.3; R62  
Repr.Cat.3; R63  
F; R11  
Xi; R36/38  
N; R51  
R67

Full text of R-phrases: see section 16

#### GHS-US classification

Flam. Liq. 2 H225  
Skin Irrit. 2 H315  
Eye Irrit. 2A H319  
Carc. 2 H351  
Repr. 2 H361  
STOT SE 3 H336  
Aquatic Acute 2 H401

Full text of H statements : see section 16

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### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazardous ingredients

: TOLUENE UNLABELED

Hazard statements (CLP)

: H225 - Highly flammable liquid and vapor  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H336 - May cause drowsiness or dizziness  
H351 - Suspected of causing cancer (in contact with skin, if inhaled, if swallowed)  
H361 - Suspected of damaging the unborn child. (in contact with skin, if inhaled, if swallowed)

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical, lighting, ventilating equipment  
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors.  
P264 - Wash Both hands thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective clothing, protective gloves.

### GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H225 - Highly flammable liquid and vapor  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H336 - May cause drowsiness or dizziness  
H351 - Suspected of causing cancer (Dermal, Inhalation, oral)  
H361 - Suspected of damaging the unborn child. (Dermal, oral, Inhalation)  
H401 - Toxic to aquatic life

Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/Bond container and receiving equipment  
P241 - Use explosion-proof electrical, lighting, ventilating equipment  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors.  
P264 - Wash Both hands thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P273 - Avoid release to the environment.  
P280 - Wear protective clothing, protective gloves.  
P302+P352 - If on skin: Wash with plenty of water  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P308+P313 - If exposed or concerned: Get medical advice/attention.

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P312 - Call a poison center or doctor if you feel unwell  
P321 - Specific treatment (see Hazard pictograms (CLP) on this label)  
P332+P313 - If skin irritation occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P362 - Take off contaminated clothing and wash before reuse.  
P370+P378 - In case of fire: Use Carbon dioxide, Dry chemical, Alcohol resistant foam, Water spray to extinguish.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P405 - Store locked up.  
P501 - Dispose of contents/container to Comply with applicable regulations

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
N-NONANE UNLABELED	(CAS-No.) 111-84-2 (EC-No.) 203-913-4	97.05492194	R10 Xn; R20 Xn; R65 Xi; R36/38 R67
TOLUENE UNLABELED	(CAS-No.) 108-88-3 (EC-No.) 203-625-9 (EC Index-No.) 601-021-00-3 (REACH-no) 01-2119471310-51	2.94451277	F; R11 Xi; R38 Xn; R65 Repr.Cat.3; R62 Repr.Cat.3; R63 R67 N; R51/53 Xn; R48/20
METHYL TRICLOSAN (RING-13C12, 99%)	(CAS-No.) 4640-01-1 (Unlabeled)	0.00014576	Xn; R20/21/22 N; R50/53
PENTACHLOROANISOLE (13C6, 99%)	(CAS-No.) 1825-21-4 (Unlabeled)	0.00014505	Xn; R22 N; R50/53
3,3',4,4'-TETRABDE (BDE-77) (13C12, 99%)	(CAS-No.) 93703-48-1 (Unlabeled)	0.0001039	Carc.Cat.1; R45 Carc.Cat.1; R49 Xn; R22 Xi; R41 Xi; R37 Xi; R38 N; R51/53
2,2',3,4,4',6-HEXABDE (BDE-139) (13C12, 99%)	(CAS-No.) 488710-25-4	0.0001039	Carc.Cat.1; R45 Carc.Cat.1; R49 Xn; R22 Xi; R41 Xi; R37 Xi; R38 N; R51/53
PENTACHLOROANISOLE UNLABELED	(CAS-No.) 1825-21-4 (Unlabeled)	0.00002918	Xn; R22 N; R50/53
METHYL TRICLOSAN UNLABELED	(CAS-No.) 4640-01-1	0.00002907	N; R50/53
2,4-DIBROMOANISOLE (RING-13C6, 99%)	(CAS-No.) 21702-84-1 (Unlabeled) (EC-No.) 244-536-5	0.00001461	Xi; R36/37/38
2,4,5-TRIBROMOANISOLE (RING-13C6, 99%)	(CAS-No.) 95970-10-8 (Unlabeled)	0.00001444	R53
2,4,6-TRIBROMOANISOLE (RING-13C6, 99%)	(CAS-No.) 607-99-8 (Unlabeled)	0.00001444	R53
4-METHOXY-2,3,3',4',5-PENTACB (13C12, 99%)	(CAS-No.) 169295-14-1 (Unlabeled) (EC Index-No.) 602-039-00-4 (Unlabeled)	0.00001441	Xn; R48/20/21/22 N; R50/53

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4-METHOXY-2,2',3,4',5,5'-HEXACB (13C12, 99%)	(CAS-No.) 169295-19-6 (Unlabeled) (EC Index-No.) 602-039-00-4 (Unlabeled)	0.00001436	Xn; R48/20 N; R50/53
4-METHOXY-2,2',3,4',5,5',6-HEPTACB (13C12, 99%)	(CAS-No.) 1629523-2 (Unlabeled) (EC Index-No.) 602-039-00-4	0.00001432	Xn; R48/20/21/22 N; R50/53
PENTABROMOANISOLE (13C6, 99%)	(CAS-No.) 1825-26-9 (Unlabeled)	0.00001425	R53
6-METHOXY-2,2',4,4'-TETRABDE (RING-13C12, 99%)	(CAS-No.) 102739-99-1 (Unlabeled)	0.00001424	T; R23 Xn; R22 Xi; R36/37/38
6'-METHOXY-2,2',4,4',6-PENTABDE (13C12, 99%)	(CAS-No.) 1391119-70-2 (Unlabeled)	0.00001419	Xn; R20/21/22 Xi; R36/37/38
2,2',3,3',4,5,5',6,6'-NONACB (PCB-208) (13C12, 99%)	(CAS-No.) 234432-92-9 (EC Index-No.) 602-039-00-4 (Unlabeled)	0.00001386	N; R50/53 R48
DIMETHYL TETRABROMOBISPHENOL A (RING-13C12, 99%)	(CAS-No.) 37853-61-5 (Unlabeled) (EC-No.) 201-236-9	0.00000729	Xi; R36/37/38 N; R50
2,4-DIBROMOANISOLE UNLABELED	(CAS-No.) 21702-84-1 (EC-No.) 244-536-5	0.00000292	Xi; R36/37/38
2,4,6-TRIBROMOANISOLE UNLABELED	(CAS-No.) 607-99-8	0.00000289	R53
2,4,5-TRIBROMOANISOLE UNLABELED	(CAS-No.) 95970-10-8	0.00000289	R53
4-METHOXY-2,3,3',4',5-PENTACB UNLABELED	(CAS-No.) 169295-14-1 (EC Index-No.) 602-039-00-4	0.00000289	Xn; R48/20/21/22 N; R50/53
4-METHOXY-2,2',3,4',5,5'-HEXACB UNLABELED	(CAS-No.) 169295-19-6 (EC Index-No.) 602-039-00-4	0.00000288	Xn; R48/20/21/22 N; R50/53
4-METHOXY-2,2',3,4',5,5',6-HEPTACB UNLABELED	(CAS-No.) 169295-23-2 (EC Index-No.) 602-039-00-4	0.00000287	Xn; R48/20/21/22 N; R50/53
6-METHOXY-2,2',4,4'-TETRABDE UNLABELED	(CAS-No.) 102739-99-1	0.00000285	N; R50/53 Xi; R36/37/38 Xn; R22
PENTABROMOANISOLE UNLABELED	(CAS-No.) 1825-26-9	0.00000285	R53
4-METHOXY-2,2',3,4'-TETRABDE UNLABELED	(CAS-No.) 602326-25-0 (Unlabeled)	0.00000285	Xn; R48/21/22 N; R50/53
3-METHOXY-2,2',4,4'-TETRABDE UNLABELED	(CAS-No.) 602326-28-0 (Unlabeled)	0.00000285	Xn; R20/21/22 N; R50/53
5-METHOXY-2,2',4,4'-TETRABDE UNLABELED	(CAS-No.) 602326-19-2 (Unlabeled)	0.00000285	Xn; R20/21/22 N; R50/53
4'-METHOXY-2,2',4,5'-TETRABDE UNLABELED	(CAS-No.) 476430-88-3 (Unlabeled)	0.00000285	Xn; R20/21/22 Xi; R36/37/38
5'-METHOXY-2,2',4,4',5-PENTABDE UNLABELED	(CAS-No.) 923925-51-3 (Unlabeled)	0.00000284	Carc. Cat. 1; R45 Carc. Cat. 1; R49 Xn; R20 Xn; R21 Xn; R22 N; R50
6-METHOXY-2,2',4,4',5-PENTABDE UNLABELED	(CAS-No.) 497106-83-9 (Unlabeled)	0.00000284	Carc. Cat. 1; R45 Carc. Cat. 1; R49 Xn; R20 Xn; R21 Xn; R22 N; R50
DIMETHYL TETRABROMOBISPHENOL A UNLABELED	(CAS-No.) 37853-61-5 (EC-No.) 201-236-9	0.00000146	N; R50 Xi; R36/38 R67

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N-NONANE UNLABELED	(CAS-No.) 111-84-2 (EC-No.) 203-913-4	97.05492194	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Asp. Tox. 1, H304
TOLUENE UNLABELED	(CAS-No.) 108-88-3 (EC-No.) 203-625-9 (EC Index-No.) 601-021-00-3 (REACH-no) 01-2119471310-51	2.94451277	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
METHYL TRICLOSAN (RING-13C12, 99%)	(CAS-No.) 4640-01-1 (Unlabeled)	0.00014576	Aquatic Acute 1, H400
PENTACHLOROANISOLE (13C6, 99%)	(CAS-No.) 1825-21-4 (Unlabeled)	0.00014505	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
3,3',4,4'-TETRABDE (BDE-77) (13C12, 99%)	(CAS-No.) 93703-48-1 (Unlabeled)	0.0001039	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H336 Aquatic Chronic 2, H411
2,2',3,4,4',6-HEXABDE (BDE-139) (13C12, 99%)	(CAS-No.) 488710-25-4	0.0001039	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H336 Aquatic Chronic 2, H411
PENTACHLOROANISOLE UNLABELED	(CAS-No.) 1825-21-4 (Unlabeled)	0.00002918	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
METHYL TRICLOSAN UNLABELED	(CAS-No.) 4640-01-1	0.00002907	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,4-DIBROMOANISOLE (RING-13C6, 99%)	(CAS-No.) 21702-84-1 (Unlabeled) (EC-No.) 244-536-5	0.00001461	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336
2,4,5-TRIBROMOANISOLE (RING-13C6, 99%)	(CAS-No.) 95970-10-8 (Unlabeled)	0.00001444	Aquatic Chronic 4, H413
2,4,6-TRIBROMOANISOLE (RING-13C6, 99%)	(CAS-No.) 607-99-8 (Unlabeled)	0.00001444	Aquatic Chronic 4, H413
4-METHOXY-2,3,3',4',5-PENTACB (13C12, 99%)	(CAS-No.) 169295-14-1 (Unlabeled) (EC Index-No.) 602-039-00-4 (Unlabeled)	0.00001441	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
4-METHOXY-2,2',3,4',5,5'-HEXACB (13C12, 99%)	(CAS-No.) 169295-19-6 (Unlabeled) (EC Index-No.) 602-039-00-4 (Unlabeled)	0.00001436	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
4-METHOXY-2,2',3,4',5,5',6-HEPTACB (13C12, 99%)	(CAS-No.) 1629523-2 (Unlabeled) (EC Index-No.) 602-039-00-4	0.00001432	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
PENTABROMOANISOLE (13C6, 99%)	(CAS-No.) 1825-26-9 (Unlabeled)	0.00001425	Aquatic Chronic 4, H413
6-METHOXY-2,2',4,4'-TETRABDE (RING-13C12, 99%)	(CAS-No.) 102739-99-1 (Unlabeled)	0.00001424	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 1 (Inhalation:vapour), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
6'-METHOXY-2,2',4,4',6-PENTABDE (13C12, 99%)	(CAS-No.) 1391119-70-2 (Unlabeled)	0.00001419	Not classified
2,2',3,3',4,5,5',6,6'-NONACB (PCB-208) (13C12, 99%)	(CAS-No.) 234432-92-9 (EC Index-No.) 602-039-00-4 (Unlabeled)	0.00001386	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
DIMETHYL TETRABROMOBISPHENOL A (RING-13C12, 99%)	(CAS-No.) 37853-61-5 (Unlabeled) (EC-No.) 201-236-9	0.00000729	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Aquatic Acute 1, H400 (M=10)
2,4-DIBROMOANISOLE UNLABELED	(CAS-No.) 21702-84-1 (EC-No.) 244-536-5	0.00000292	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
2,4,6-TRIBROMOANISOLE UNLABELED	(CAS-No.) 607-99-8	0.00000289	Aquatic Chronic 4, H413
2,4,5-TRIBROMOANISOLE UNLABELED	(CAS-No.) 95970-10-8	0.00000289	Aquatic Chronic 4, H413
4-METHOXY-2,3,3',4',5-PENTACB UNLABELED	(CAS-No.) 169295-14-1 (EC Index-No.) 602-039-00-4	0.00000289	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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4-METHOXY-2,2',3,4',5,5'-HEXACB UNLABELED	(CAS-No.) 169295-19-6 (EC Index-No.) 602-039-00-4	0.00000288	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
4-METHOXY-2,2',3,4',5,5',6-HEPTACB UNLABELED	(CAS-No.) 169295-23-2 (EC Index-No.) 602-039-00-4	0.00000287	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
6-METHOXY-2,2',4,4'-TETRABDE UNLABELED	(CAS-No.) 102739-99-1	0.00000285	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
PENTABROMOANISOLE UNLABELED	(CAS-No.) 1825-26-9	0.00000285	Aquatic Chronic 4, H413
4-METHOXY-2,2',3,4'-TETRABDE UNLABELED	(CAS-No.) 602326-25-0 (Unlabeled)	0.00000285	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 STOT SE 2, H371 Aquatic Chronic 1, H410
3-METHOXY-2,2',4,4'-TETRABDE UNLABELED	(CAS-No.) 602326-28-0 (Unlabeled)	0.00000285	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312
5-METHOXY-2,2',4,4'-TETRABDE UNLABELED	(CAS-No.) 602326-19-2 (Unlabeled)	0.00000285	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312
4'-METHOXY-2,2',4,5'-TETRABDE UNLABELED	(CAS-No.) 476430-88-3 (Unlabeled)	0.00000285	Not classified
5'-METHOXY-2,2',4,4',5-PENTABDE UNLABELED	(CAS-No.) 923925-51-3 (Unlabeled)	0.00000284	Carc. 1A, H350 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Aquatic Acute 1, H400
6-METHOXY-2,2',4,4',5-PENTABDE UNLABELED	(CAS-No.) 497106-83-9 (Unlabeled)	0.00000284	Carc. 1A, H350 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Aquatic Acute 1, H400
DIMETHYL TETRABROMOBISPHENOL A UNLABELED	(CAS-No.) 37853-61-5 (EC-No.) 201-236-9	0.00000146	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Aquatic Acute 1, H400 (M=10)

Name	Product identifier	%	GHS-US classification
N-NONANE UNLABELED	(CAS-No.) 111-84-2	97.05492194	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Asp. Tox. 1, H304
TOLUENE UNLABELED	(CAS-No.) 108-88-3	2.94451277	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401
METHYL TRICLOSAN (RING- <sup>13</sup> C <sub>12</sub> , 99%)	(CAS-No.) 4640-01-1 (Unlabeled)	0.00014576	Aquatic Acute 1, H400
PENTACHLOROANISOLE ( <sup>13</sup> C <sub>6</sub> , 99%)	(CAS-No.) 1825-21-4 (Unlabeled)	0.00014505	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,3',4,4'-TETRABDE (BDE-77) ( <sup>13</sup> C <sub>12</sub> , 99%)	(CAS-No.) 93703-48-1 (Unlabeled)	0.0001039	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H336 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
2,2',3,4,4',6-HEXABDE (BDE-139) ( <sup>13</sup> C <sub>12</sub> , 99%)	(CAS-No.) 488710-25-4	0.0001039	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H336 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
PENTACHLOROANISOLE UNLABELED	(CAS-No.) 1825-21-4 (Unlabeled)	0.00002918	Aquatic Acute 1, H400
METHYL TRICLOSAN UNLABELED	(CAS-No.) 4640-01-1	0.00002907	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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Name	Product identifier	%	GHS-US classification
2,4-DIBROMOANISOLE (RING-13C6, 99%)	(CAS-No.) 21702-84-1 (Unlabeled)	0.00001461	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336
2,4,5-TRIBROMOANISOLE (RING-13C6, 99%)	(CAS-No.) 95970-10-8 (Unlabeled)	0.00001444	Aquatic Chronic 4, H413
2,4,6-TRIBROMOANISOLE (RING-13C6, 99%)	(CAS-No.) 607-99-8 (Unlabeled)	0.00001444	Aquatic Chronic 4, H413
4-METHOXY-2,3,3',4',5-PENTACB (13C12, 99%)	(CAS-No.) 169295-14-1 (Unlabeled)	0.00001441	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
4-METHOXY-2,2',3,4',5,5'-HEXACB (13C12, 99%)	(CAS-No.) 169295-19-6 (Unlabeled)	0.00001436	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
4-METHOXY-2,2',3,4',5,5',6-HEPTACB (13C12, 99%)	(CAS-No.) 1629523-2 (Unlabeled)	0.00001432	Not classified
PENTABROMOANISOLE (13C6, 99%)	(CAS-No.) 1825-26-9 (Unlabeled)	0.00001425	Aquatic Chronic 4, H413
6-METHOXY-2,2',4,4'-TETRABDE (RING-13C12, 99%)	(CAS-No.) 102739-99-1 (Unlabeled)	0.00001424	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 1 (Inhalation:vapour), H330 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
6'-METHOXY-2,2',4,4',6-PENTABDE (13C12, 99%)	(CAS-No.) 1391119-70-2 (Unlabeled)	0.00001419	Not classified
2,2',3,3',4,5,5',6,6'-NONACB (PCB-208) (13C12, 99%)	(CAS-No.) 234432-92-9	0.00001386	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
DIMETHYL TETRABROMOBISPHENOL A (RING-13C12, 99%)	(CAS-No.) 37853-61-5 (Unlabeled)	0.00000729	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336 Aquatic Acute 1, H400
2,4-DIBROMOANISOLE UNLABELED	(CAS-No.) 21702-84-1	0.00000292	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
2,4,6-TRIBROMOANISOLE UNLABELED	(CAS-No.) 607-99-8	0.00000289	Aquatic Chronic 4, H413
2,4,5-TRIBROMOANISOLE UNLABELED	(CAS-No.) 95970-10-8	0.00000289	Aquatic Chronic 4, H413
4-METHOXY-2,3,3',4',5-PENTACB UNLABELED	(CAS-No.) 169295-14-1	0.00000289	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
4-METHOXY-2,2',3,4',5,5'-HEXACB UNLABELED	(CAS-No.) 169295-19-6	0.00000288	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
4-METHOXY-2,2',3,4',5,5',6-HEPTACB UNLABELED	(CAS-No.) 169295-23-2	0.00000287	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
6-METHOXY-2,2',4,4'-TETRABDE UNLABELED	(CAS-No.) 102739-99-1	0.00000285	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
PENTABROMOANISOLE UNLABELED	(CAS-No.) 1825-26-9	0.00000285	Aquatic Chronic 4, H413
4-METHOXY-2,2',3,4'-TETRABDE UNLABELED	(CAS-No.) 602326-25-0 (Unlabeled)	0.00000285	Not classified
3-METHOXY-2,2',4,4'-TETRABDE UNLABELED	(CAS-No.) 602326-28-0 (Unlabeled)	0.00000285	Not classified
5-METHOXY-2,2',4,4'-TETRABDE UNLABELED	(CAS-No.) 602326-19-2 (Unlabeled)	0.00000285	Not classified
4'-METHOXY-2,2',4,5'-TETRABDE UNLABELED	(CAS-No.) 476430-88-3 (Unlabeled)	0.00000285	Not classified
5'-METHOXY-2,2',4,4',5-PENTABDE UNLABELED	(CAS-No.) 923925-51-3 (Unlabeled)	0.00000284	Not classified
6-METHOXY-2,2',4,4',5-PENTABDE UNLABELED	(CAS-No.) 497106-83-9 (Unlabeled)	0.00000284	Not classified
DIMETHYL TETRABROMOBISPHENOL A UNLABELED	(CAS-No.) 37853-61-5	0.00000146	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336 Aquatic Acute 1, H400

Full text of R- and H- phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Call a physician immediately.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell. Give oxygen or artificial respiration if necessary.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.

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First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: May cause drowsiness or dizziness. Suspected of damaging the unborn child. Suspected of causing cancer (in contact with skin, if inhaled, if swallowed).
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation. May be harmful in contact with skin.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Risk of lung edema.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapor.
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### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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#### 6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal.
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### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
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### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store at room temperature away from light and moisture.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.

### 7.3. Specific end use(s)

No additional information available



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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/13C, 99%)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	CNS impair
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1050 mg/m <sup>3</sup> USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm USA. NIOSH Recommended Exposure Limits
USA NIOSH	Remark (NIOSH)	Central Nervous System impairment
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1050 mg/m <sup>3</sup> USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	1050 California permissible exposure limits for chemical contaminants.
USA OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm California permissible exposure limits for chemical contaminants.
N-NONANE UNLABELED (111-84-2)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	CNS impair
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1050 mg/m <sup>3</sup> USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm USA. NIOSH Recommended Exposure Limits
USA NIOSH	Remark (NIOSH)	Central Nervous System impairment
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1050 mg/m <sup>3</sup> USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	1050 California permissible exposure limits for chemical contaminants.
USA OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm California permissible exposure limits for chemical contaminants.
TOLUENE UNLABELED (108-88-3)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Visual impairment. Female reproductive. Pregnancy loss. 2015 Adoption. Substances for which there is a Biological Exposure Index or Indices (see BEI® section). Not classifiable as a human carcinogen.; Component: Toluene CAS-No.: 108-88-3 Parameters: Toluene Value: 0.0300 mg/l Biological specimen: Urine Remarks: End of shift (As soon as possible after exposure ceases) Basis: ACGIH - Biological Exposure Indices (BEI); Component: Toluene CAS-No.: 108-88-3 Parameters: Toluene Value: 0.0200 mg/l Biological specimen: In blood Remarks: Prior to last shift of workweek Basis: ACGIH - Biological Exposure Indices (BEI); Component: Toluene CAS-No.: 108-88-3 Parameters: o-Cresol Value: 0.3000 mg/g Biological specimen: Urine Remarks: End of shift (As soon as possible after exposure ceases) Basis: ACGIH - Biological Exposure Indices (BEI)
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	375 mg/m <sup>3</sup> USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (TWA) (ppm)	100 ppm USA. NIOSH Recommended Exposure Limits

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TOLUENE UNLABELED (108-88-3)		
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	560 mg/m <sup>3</sup> USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (ppm)	150 ppm USA. NIOSH Recommended Exposure Limits
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	375 mg/m <sup>3</sup> USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (STEL) (mg/m <sup>3</sup> )	560 mg/m <sup>3</sup> USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (STEL) (ppm)	150 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm USA. Occupational Exposure Limits (OSHA) - Table Z-2
USA OSHA	Remark (OSHA)	OSHA PEL (TWA) - 200 ppm - USA. Occupational Exposure Limits (OSHA) - Table Z-2. Remarks: Z37.12-1967

### 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
 Personal protective equipment : Protective clothing. Protective goggles. Gloves. Self-contained breathing apparatus.



Materials for protective clothing : Wear suitable protective clothing and gloves.  
 Hand protection : protective gloves.  
 Eye protection : Chemical goggles or face shield. Chemical goggles or safety glasses.  
 Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.  
 Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Approved respirator.  
 Environmental exposure controls : Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
 Appearance : Liquid  
 Color : Colorless  
 Odor : No data available  
 Odor threshold : No data available  
 pH : No data available  
 Relative evaporation rate (butyl acetate=1) : No data available  
 Melting point : No data available  
 Freezing point : No data available  
 Boiling point : No data available  
 Flash point : No data available  
 Auto-ignition temperature : No data available  
 Decomposition temperature : No data available  
 Flammability (solid, gas) : No data available  
 Vapor pressure : No data available  
 Relative vapor density at 20 °C : No data available  
 Relative density : No data available  
 Solubility : No data available  
 Log Pow : No data available  
 Log Kow : No data available

# EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/<sup>13</sup>C, 99%)

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Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

See storage and expiration date on CoA.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

#### 6-METHOXY-2,2',4,4'-TETRABDE UNLABELED (102739-99-1)

ATE CLP (oral)	500.000 mg/kg body weight
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#### PENTACHLOROANISOLE (13C6, 99%) (1825-21-4 (Unlabeled))

ATE CLP (oral)	500.000 mg/kg body weight
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#### N-NONANE UNLABELED (111-84-2)

LC50 inhalation rat (mg/l)	23760 mg/m <sup>3</sup> male - 4 h
ATE CLP (vapors)	11.000 mg/l/4h
Skin corrosion/irritation, Dermal, rat	Result: Skin Irritation (Draize Test)
Additional information	: S. Typhimurium Result: negative

#### TOLUENE UNLABELED (108-88-3)

LD50 oral rat	> 5580 mg/kg
LD50 dermal rabbit	12196 mg/kg
LC50 inhalation rat (mg/l)	12,500 - 28,800 mg/m <sup>3</sup> - 4 h
ATE CLP (dermal)	12196.000 mg/kg body weight
ATE CLP (vapors)	12.500 mg/l/4h
ATE CLP (dust, mist)	12.500 mg/l/4h

#### 6-METHOXY-2,2',4,4'-TETRABDE (RING-13C12, 99%) (102739-99-1 (Unlabeled))

ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (vapors)	0.050 mg/l/4h

#### 4-METHOXY-2,2',3,4'-TETRABDE UNLABELED (602326-25-0 (Unlabeled))

ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dermal)	1100.000 mg/kg body weight

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer (in contact with skin, if inhaled, if swallowed).
Reproductive toxicity	: Suspected of damaging the unborn child.
Specific target organ toxicity – single exposure	: May cause drowsiness or dizziness.

# EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/<sup>13</sup>C, 99%)

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Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Based on available data, the classification criteria are not met.
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation. May be harmful in contact with skin.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Risk of lung edema.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Toxic to aquatic life.

#### DIMETHYL TETRABROMOBISPHENOL A UNLABELED (37853-61-5)

LC50 fish 1	0.06 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	7.9 mg/l Daphnia magna (Water flea) - 48 h

#### PENTACHLOROANISOLE (13C6, 99%) (1825-21-4 (Unlabeled))

LC50 fish 1	0.65 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	0.027 mg/l Daphnia magna (Water flea) - 48 h

#### TOLUENE UNLABELED (108-88-3)

EC50 Daphnia 1	8 mg/l Daphnia magna (Water flea) - 24h
LC50 fish 2	7.63 mg/l Oncorhynchus mykiss (Rainbow trout) - 96 h
EC50 Daphnia 2	6 mg/l Daphnia magna (Water flea) - Immobilization - 48 h
ErC50 (algae)	245 mg/l Chlorella vulgaris (Fresh water algae) - 24 h
ErC50 (other aquatic plants)	10 mg/l Pseudokirchneriella subcapitata (Green algae) - 24 h
NOEC (chronic)	5.44 mg/l Pimephales promelas (fathead minnow) - 7 d

#### PENTACHLOROANISOLE UNLABELED (1825-21-4 (Unlabeled))

LC50 fish 1	0.65 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	0.027 mg/l Daphnia magna (Water flea) - 48 h

#### DIMETHYL TETRABROMOBISPHENOL A (RING-13C12, 99%) (37853-61-5 (Unlabeled))

LC50 fish 1	0.06 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	7.9 mg/l Daphnia magna (Water flea) - 48 h

### 12.2. Persistence and degradability

#### TOLUENE UNLABELED (108-88-3)

Persistence and degradability : Readily biodegradable.

### 12.3. Bioaccumulative potential

#### METHYL TRICLOSAN (RING-13C12, 99%) (4640-01-1 (Unlabeled))

Log Pow : 5.269

#### METHYL TRICLOSAN UNLABELED (4640-01-1)

Log Pow : 5.269

#### N-NONANE UNLABELED (111-84-2)

Log Pow : 5.65  
Bioaccumulative potential : Indication of bioaccumulation.

#### TOLUENE UNLABELED (108-88-3)

BCF fish 1 : 0.05 mg/l Leuciscus idus (Golden orfe) - 3 d  
Bioconcentration factor (BCF REACH) : 90

### 12.5. Results of PBT and vPvB assessment

#### TOLUENE UNLABELED (108-88-3)

PBT: not relevant – no registration required

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### 12.6. Other adverse effects

Other adverse effects : Disposal must be done according to official regulations.  
Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.  
Product/Packaging disposal recommendations : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.  
Ecology - waste materials : Dispose of as unused product.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No.(DOT) : 1920  
DOT NA no. UN1920

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Nonanes  
Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120  
Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : III - Minor Danger  
DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.  
IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).  
T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3)  
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / 1 + a (tr - tf)$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.  
DOT Packaging Exceptions (49 CFR 173.xxx) : 150  
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203  
DOT Packaging Bulk (49 CFR 173.xxx) : 242  
Marine pollutant : No

### 14.3. Additional information

Other information : No supplementary information available.

### Overland transport

Packing group (ADR) : III  
Class (ADR) : 3 - Flammable liquid  
Hazard identification number (Kemler No.) : 30  
Classification code (ADR) : F1

# EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/13C, 99%)

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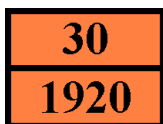
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Hazard labels (ADR) : 3 - Flammable liquids



Orange plates :



Tunnel restriction code (ADR) : D/E

Limited quantities (ADR) : 5l

EAC : 3Y

Excepted quantities (ADR) : E1

### Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

MFAG-No : 128

### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 60 L  
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L  
CFR 175.75)

### 14.4. Environmental hazards

Other information : No supplementary information available.

### 14.5. Special precautions for user

### 14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/13C, 99%)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag : T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

SARA Section 302 Threshold Planning Quantity (TPQ) : Not subject to reporting requirements of the United States SARA Section 302.

SARA Section 311/312 Hazard Classes : Fire hazard  
Immediate (acute) health hazard

SARA Section 313 - Emission Reporting : Not subject to reporting requirements of the United States SARA Section 313.

#### 2,4,5-TRIBROMOANISOLE (RING-13C6, 99%) (95970-10-8 (Unlabeled))

SARA Section 302 Threshold Planning Quantity (TPQ) : Not subject to reporting requirements of the United States SARA Section 302

SARA Section 313 - Emission Reporting : Not subject to reporting requirements of the United States SARA Section 313

#### 6-METHOXY-2,2',4,4'-TETRABDE UNLABELED (102739-99-1)

SARA Section 302 Threshold Planning Quantity (TPQ) : Not subject to reporting requirements of the United States SARA Section 302.

SARA Section 311/312 Hazard Classes : Immediate (acute) health hazard  
Delayed (chronic) health hazard

SARA Section 313 - Emission Reporting : Not subject to reporting requirements of the United States SARA Section 313.

#### DIMETHYL TETRABROMOBISPHENOL A UNLABELED (37853-61-5)

SARA Section 302 Threshold Planning Quantity (TPQ) : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA Section 311/312 Hazard Classes : Immediate (acute) health hazard

SARA Section 313 - Emission Reporting : Not subject to reporting requirements of the United States SARA Section 313

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<b>METHYL TRICLOSAN (RING-13C12, 99%) (4640-01-1 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>METHYL TRICLOSAN UNLABELED (4640-01-1)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>PENTACHLOROANISOLE (13C6, 99%) (1825-21-4 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>N-NONANE UNLABELED (111-84-2)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>TOLUENE UNLABELED (108-88-3)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313
<b>PENTACHLOROANISOLE UNLABELED (1825-21-4 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>2,4,6-TRIBROMOANISOLE UNLABELED (607-99-8)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>2,4,5-TRIBROMOANISOLE UNLABELED (95970-10-8)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>2,4,6-TRIBROMOANISOLE (RING-13C6, 99%) (607-99-8 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>PENTABROMOANISOLE (13C6, 99%) (1825-26-9 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>PENTABROMOANISOLE UNLABELED (1825-26-9)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>2,4-DIBROMOANISOLE (RING-13C6, 99%) (21702-84-1 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

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<b>2,4-DIBROMOANISOLE (RING-13C6, 99%) (21702-84-1 (Unlabeled))</b>	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>2,4-DIBROMOANISOLE UNLABELED (21702-84-1)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>6-METHOXY-2,2',4,4'-TETRABDE (RING-13C12, 99%) (102739-99-1 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>DIMETHYL TETRABROMOBISPHENOL A (RING-13C12, 99%) (37853-61-5 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>2,2',3,3',4,5,5',6,6'-NONACB (PCB-208) (13C12, 99%) (234432-92-9)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>4-METHOXY-2,3,3',4',5-PENTACB UNLABELED (169295-14-1)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>4-METHOXY-2,3,3',4',5-PENTACB (13C12, 99%) (169295-14-1 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>4-METHOXY-2,2',3,4',5,5'-HEXACB UNLABELED (169295-19-6)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>4-METHOXY-2,2',3,4',5,5'-HEXACB (13C12, 99%) (169295-19-6 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>4-METHOXY-2,2',3,4',5,5'-HEXACB UNLABELED (602326-25-0 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>4-METHOXY-2,2',3,4',5,5',6-HEPTACB UNLABELED (169295-23-2)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>4-METHOXY-2,2',3,4',5,5',6-HEPTACB (13C12, 99%) (1629523-2 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313
<b>3-METHOXY-2,2',4,4'-TETRABDE UNLABELED (602326-28-0 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>5-METHOXY-2,2',4,4'-TETRABDE UNLABELED (602326-19-2 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313



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<b>4'-METHOXY-2,2',4,5'-TETRABDE UNLABELED (476430-88-3 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>5'-METHOXY-2,2',4,4',5-PENTABDE UNLABELED (923925-51-3 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>6-METHOXY-2,2',4,4',5-PENTABDE UNLABELED (497106-83-9 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>6'-METHOXY-2,2',4,4',6-PENTABDE (13C12, 99%) (1391119-70-2 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>3,3',4,4'-TETRABDE (BDE-77) (13C12, 99%) (93703-48-1 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>2,2',3,4,4',6-HEXABDE (BDE-139) (13C12, 99%) (488710-25-4)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

### 15.2. International regulations

#### CANADA

<b>EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/13C, 99%)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
<b>N-NONANE UNLABELED (111-84-2)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
<b>TOLUENE UNLABELED (108-88-3)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
<b>2,2',3,3',4,5,5',6,6'-NONACB (PCB-208) (13C12, 99%) (234432-92-9)</b>	

#### 15.2.1. National regulations

<b>TOLUENE UNLABELED (108-88-3)</b>	
<b>2,2',3,3',4,5,5',6,6'-NONACB (PCB-208) (13C12, 99%) (234432-92-9)</b>	
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)	

### 15.3. US State regulations

<b>EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/13C, 99%)()</b>	
U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

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<b>2,4,5-TRIBROMOANISOLE (RING-13C6, 99%) (95970-10-8 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>6-METHOXY-2,2',4,4'-TETRABDE UNLABELED (102739-99-1)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>DIMETHYL TETRABROMOBISPHENOL A UNLABELED (37853-61-5)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>METHYL TRICLOSAN (RING-13C12, 99%) (4640-01-1 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>METHYL TRICLOSAN UNLABELED (4640-01-1)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>PENTACHLOROANISOLE (13C6, 99%) (1825-21-4 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>N-NONANE UNLABELED (111-84-2)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>TOLUENE UNLABELED (108-88-3)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	No	No	
<b>PENTACHLOROANISOLE UNLABELED (1825-21-4 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>2,4,6-TRIBROMOANISOLE UNLABELED (607-99-8)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	

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<b>2,4,6-TRIBROMOANISOLE UNLABELED (607-99-8)</b>				
		Female	Male	
No	No	No	No	
<b>2,4,5-TRIBROMOANISOLE UNLABELED (95970-10-8)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>2,4,6-TRIBROMOANISOLE (RING-13C6, 99%) (607-99-8 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>PENTABROMOANISOLE (13C6, 99%) (1825-26-9 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>PENTABROMOANISOLE UNLABELED (1825-26-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>2,4-DIBROMOANISOLE (RING-13C6, 99%) (21702-84-1 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>2,4-DIBROMOANISOLE UNLABELED (21702-84-1)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>6-METHOXY-2,2',4,4'-TETRABDE (RING-13C12, 99%) (102739-99-1 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>DIMETHYL TETRABROMOBISPHENOL A (RING-13C12, 99%) (37853-61-5 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>2,2',3,3',4,5,5',6,6'-NONACB (PCB-208) (13C12, 99%) (234432-92-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)

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<b>2,2',3,3',4,5,5',6,6'-NONACB (PCB-208) (13C12, 99%) (234432-92-9)</b>				
Yes	Yes	Yes	Yes	
<b>4-METHOXY-2,3,3',4',5-PENTACB UNLABELED (169295-14-1)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>4-METHOXY-2,3,3',4',5-PENTACB (13C12, 99%) (169295-14-1 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>4-METHOXY-2,2',3,4',5,5'-HEXACB UNLABELED (169295-19-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>4-METHOXY-2,2',3,4',5,5'-HEXACB (13C12, 99%) (169295-19-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>4-METHOXY-2,2',3,4'-TETRABDE UNLABELED (602326-25-0 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>4-METHOXY-2,2',3,4',5,5',6-HEPTACB UNLABELED (169295-23-2)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>4-METHOXY-2,2',3,4',5,5',6-HEPTACB (13C12, 99%) (1629523-2 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>3-METHOXY-2,2',4,4'-TETRABDE UNLABELED (602326-28-0 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>5-METHOXY-2,2',4,4'-TETRABDE UNLABELED (602326-19-2 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	

# EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/13C, 99%)

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<b>4'-METHOXY-2,2',4,5'-TETRABDE UNLABELED (476430-88-3 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>5'-METHOXY-2,2',4,4',5-PENTABDE UNLABELED (923925-51-3 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>6-METHOXY-2,2',4,4',5-PENTABDE UNLABELED (497106-83-9 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>6'-METHOXY-2,2',4,4',6-PENTABDE (13C12, 99%) (139119-70-2 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>3,3',4,4'-TETRABDE (BDE-77) (13C12, 99%) (93703-48-1 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>2,2',3,4,4',6-HEXABDE (BDE-139) (13C12, 99%) (488710-25-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>2,4,5-TRIBROMOANISOLE (RING-13C6, 99%) (95970-10-8 (Unlabeled))</b>				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>6-METHOXY-2,2',4,4'-TETRABDE UNLABELED (102739-99-1)</b>				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>DIMETHYL TETRABROMOBISPHENOL A UNLABELED (37853-61-5)</b>				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>METHYL TRICLOSAN (RING-13C12, 99%) (4640-01-1 (Unlabeled))</b>				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>METHYL TRICLOSAN UNLABELED (4640-01-1)</b>				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List				

# EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/13C, 99%)

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<b>METHYL TRICLOSAN UNLABELED (4640-01-1)</b>
U.S. - New Jersey - Right to Know Hazardous Substance List
<b>PENTACHLOROANISOLE (13C6, 99%) (1825-21-4 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>N-NONANE UNLABELED (111-84-2)</b>
<b>State or local regulations</b>
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances
<b>TOLUENE UNLABELED (108-88-3)</b>
<b>State or local regulations</b>
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List
<b>PENTACHLOROANISOLE UNLABELED (1825-21-4 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,4,6-TRIBROMOANISOLE UNLABELED (607-99-8)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,4,5-TRIBROMOANISOLE UNLABELED (95970-10-8)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,4,6-TRIBROMOANISOLE (RING-13C6, 99%) (607-99-8 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>PENTABROMOANISOLE (13C6, 99%) (1825-26-9 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>PENTABROMOANISOLE UNLABELED (1825-26-9)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,4-DIBROMOANISOLE (RING-13C6, 99%) (21702-84-1 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,4-DIBROMOANISOLE UNLABELED (21702-84-1)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List

# EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/13C, 99%)

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<b>DIMETHYL TETRABROMOBIPHENOL A (RING-13C12, 99%) (37853-61-5 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,2',3,3',4,5,5',6,6'-NONACB (PCB-208) (13C12, 99%) (234432-92-9)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Excluded Volatile Organic Compounds
<b>4-METHOXY-2,3,3',4',5-PENTACB UNLABELED (169295-14-1)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>4-METHOXY-2,3,3',4',5-PENTACB (13C12, 99%) (169295-14-1 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>4-METHOXY-2,2',3,4',5,5'-HEXACB UNLABELED (169295-19-6)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>4-METHOXY-2,2',3,4',5,5'-HEXACB (13C12, 99%) (169295-19-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>4-METHOXY-2,2',3,4'-TETRABDE UNLABELED (602326-25-0 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>4-METHOXY-2,2',3,4',5,5',6-HEPTACB UNLABELED (169295-23-2)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>4-METHOXY-2,2',3,4',5,5',6-HEPTACB (13C12, 99%) (1629523-2 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>3-METHOXY-2,2',4,4'-TETRABDE UNLABELED (602326-28-0 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>5-METHOXY-2,2',4,4'-TETRABDE UNLABELED (602326-19-2 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>4'-METHOXY-2,2',4,5'-TETRABDE UNLABELED (476430-88-3 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

# EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/13C, 99%)

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### 5'-METHOXY-2,2',4,4',5-PENTABDE UNLABELED (923925-51-3 (Unlabeled))

#### State or local regulations

U.S. - Massachusetts - Right To Know List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - New Jersey - Right to Know Hazardous Substance List

### 6-METHOXY-2,2',4,4',5-PENTABDE UNLABELED (497106-83-9 (Unlabeled))

#### State or local regulations

U.S. - Massachusetts - Right To Know List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - New Jersey - Right to Know Hazardous Substance List

### 6'-METHOXY-2,2',4,4',6-PENTABDE (13C12, 99%) (1391119-70-2 (Unlabeled))

#### State or local regulations

U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - New Jersey - Right to Know Hazardous Substance List

### 3,3',4,4'-TETRABDE (BDE-77) (13C12, 99%) (93703-48-1 (Unlabeled))

#### State or local regulations

U.S. - Massachusetts - Right To Know List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - New Jersey - Right to Know Hazardous Substance List

### 2,2',3,4,4',6-HEXABDE (BDE-139) (13C12, 99%) (488710-25-4)

#### State or local regulations

U.S. - Massachusetts - Right To Know List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases:

Acute Tox. 1 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 1
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Repr. 2	Reproductive toxicity Category 2
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 2	Specific target organ toxicity (single exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3



# EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/13C, 99%)

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STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H350	May cause cancer
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H361d	Suspected of damaging the unborn child.
H371	May cause damage to organs
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life
R10	Flammable
R11	Highly flammable
R20	Harmful by inhalation
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R21	Harmful in contact with skin
R22	Harmful if swallowed
R23	Toxic by inhalation
R36/37/38	Irritating to eyes, respiratory system and skin
R36/38	Irritating to eyes and skin
R37	Irritating to respiratory system
R38	Irritating to skin
R40	Limited evidence of a carcinogenic effect
R41	Risk of serious damage to eyes
R45	May cause cancer
R48	Danger of serious damage to health by prolonged exposure
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R48/20/21/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed
R48/21/22	Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
R49	May cause cancer by inhalation
R50	Very toxic to aquatic organisms
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51	Toxic to aquatic organisms
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R53	May cause long-term adverse effects in the aquatic environment
R62	Possible risk of impaired fertility
R63	Possible risk of harm to the unborn child
R65	Harmful: may cause lung damage if swallowed
R67	Vapors may cause drowsiness and dizziness
F	Highly flammable
N	Dangerous for the environment
T	Toxic
Xi	Irritant
Xn	Harmful

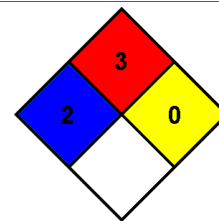
# EXTENDED PHENOLIC CALIBRATION SOLUTION CS4 (UNLABELED/13C, 99%)

ES-5510-CS4

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

NFPA health hazard	: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard	: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.



### Hazard Rating

Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 3 Serious Hazard
Physical	: 0 Minimal Hazard

CIL Multi-Solvent Mixture SDS

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*