



# FORTIFIED COD LIVER OIL REFERENCE MATERIAL

## Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 21/01/2016

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Version: 1.0

**EDF-5462**

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

#### 1.1. Product identifier

Product form : Mixtures  
Product name : FORTIFIED COD LIVER OIL REFERENCE MATERIAL  
Product code : EDF-5462

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

##### 1.2.1. Relevant identified uses

No additional information available

##### 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]

Not classified

##### Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

##### Classification (GHS-US)

Not classified

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

Hazardous ingredients : 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED, 1,2,3,7,8,9-  
HEXACHLORODIBENZO-P-DIOXIN, 1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN  
UNLABELED, 1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED, 1,2,3,6,7,8-  
HEXACHLORODIBENZO-P-DIOXIN UNLABELED, 1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-  
DIOXIN UNLABELED

##### GHS-US labeling

No labeling applicable

#### 2.3. Other hazards

No additional information available

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
COD LIVER OIL	(CAS No) 8001-69-2 (EC no) 232-289-6	99.999996813	Not classified
2,2',4,4',5,5'-HEXACB UNLABELED	(CAS No) 35065-27-1 (EC no) 215-648-1	0.000000424	R33
2,2',3,4,4',5'-HEXACB UNLABELED	(CAS No) 35065-28-2	0.000000419	N; R50/53 R33
2,2',3,4,4',5,5'-HEPTACB UNLABELED	(CAS No) 35065-29-3	0.000000025	R33
2,3',4,4',5-PENTACB UNLABELED	(CAS No) 31508-00-6 (EC no) 215-648-1 (EC index no) 602-039-00-4	0.000000167	Xn; R22
2,2',4,4'-TETRABDE (BDE-47) UNLABELED	(CAS No) 5436-43-1	0.000000148	Carc.Cat.1; R45 Carc.Cat.1; R49 Xn; R22 Xi; R41 Xi; R37 Xi; R38 N; R51/53
2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS No) 51207-31-9	0.000000143	Xn; R22 Xi; R36 R53
2,2',4,5,5'-PENTACB UNLABELED	(CAS No) 37680-73-2	0.000000102	R33
2,2',3,3',4,4',5-HEPTACB UNLABELED	(CAS No) 35065-30-6	0.0000000956	R33
2,2',3,4',5,5',6-HEPTACB UNLABELED	(CAS No) 52663-68-0	0.0000000859	R33
2,2',3,4',5',6-HEXACB UNLABELED	(CAS No) 38380-04-0	0.0000000819	R33
2,2',3,3',4,4'-HEXACB UNLABELED	(CAS No) 38380-07-3	0.0000000812	N; R51/53 Xn; R48/20/21/22
2,3,3',4,4'-PENTACB UNLABELED	(CAS No) 32598-14-4 (EC index no) 602-039-00-4	0.0000000769	Xn; R22 R33 N; R50/53
2,3,3',4',6-PENTACB UNLABELED	(CAS No) 38380-03-9	0.0000000599	R33
2,2',5,5'-TETRACB UNLABELED	(CAS No) 35693-99-3 (EC index no) 602-039-00-4	0.0000000533	Xn; R22 N; R50/53
2,2',4,4',5-PENTACB UNLABELED	(CAS No) 38380-01-7	0.0000000519	R33
2,3,3',4,4',5-HEXACB UNLABELED	(CAS No) 38380-08-4 (EC index no) 602-039-00-4	0.0000000501	R33
DECACB UNLABELED	(CAS No) 2051-24-3	0.0000000488	N; R50/53
2,4,4'-TRICB UNLABELED	(CAS No) 7012-37-5 (EC no) 230-293-2	0.000000045	Xi; R36/37/38 N; R50/53
1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS No) 57117-41-6	0.0000000387	Xn; R22 Xi; R36 R53
2,2',4,4',6-PENTABDE (BDE-100) UNLABELED	(CAS No) 189084-64-8	0.0000000357	Carc.Cat.1; R45 Carc.Cat.1; R49 Xn; R22 Xi; R41 Xi; R37 Xi; R38 N; R51/53
2,2',3,4,4',5',6-HEPTACB UNLABELED	(CAS No) 52663-69-1	0.0000000338	R33
2,2',3,3',4,4',5,5'-OCTACB UNLABELED	(CAS No) 35694-08-7	0.0000000302	Xn; R48/20 N; R50/53

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Name	Product identifier	%	Classification according to Directive 67/548/EEC
2,3,3',4,4',6-HEXACB UNLABELED	(CAS No) 74472-42-7	0.0000000274	R33
2,3',4,4',5,5'-HEXACB UNLABELED	(CAS No) 52663-72-6 (EC index no) 602-039-00-4	0.0000000271	R33
2,2',3,4,5,5'-HEXACB UNLABELED		0.0000000256	N; R50/53 R33 R48
2,2',3,5,5',6-HEXACB UNLABELED	(CAS No) 52663-63-5	0.0000000231	R33
2,2',4,4',5,6'-HEXABDE (BDE-154) UNLABELED	(CAS No) 207122-15-4	0.0000000229	Carc.Cat.1; R45 Carc.Cat.1; R49 Xn; R22 Xi; R41 Xi; R37 Xi; R38 N; R51/53
2,3',4,4'-TETRACB UNLABELED		0.0000000211	Xn; R48/20/21/22 N; R50/53 R33
2,2',3,3',4',5,6-HEPTACB UNLABELED	(CAS No) 52663-70-4	0.0000000207	R33
2,2',3,3',5,5',6-HEPTACB UNLABELED		0.0000000194	N; R50/53 R33 R48
2,2',4,4',5-PENTABDE (BDE-99) UNLABELED	(CAS No) 60348-60-9	0.0000000193	Carc.Cat.1; R45 Carc.Cat.1; R49 Xn; R22 Xi; R41 Xi; R37 Xi; R38 N; R51/53
2,3,3',4,4',5'-HEXACB UNLABELED	(CAS No) 69782-90-7 (EC index no) 602-039-00-4	0.0000000168	R33
2,2',3,4,4',5-HEXACB UNLABELED	(CAS No) 35694-06-5	0.0000000143	R33 N; R50/53
2,4,4',5-TETRACB UNLABELED	(CAS No) 32690-93-0	0.0000000142	R33
2,2',3,3',4,4',5,5',6-NONACB UNLABELED	(CAS No) 40186-72-9	0.000000013	R33
1,2,3,4,6,7,8,9-OCTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 3268-87-9	0.0000000115	T+; R28 Xi; R36 Carc.Cat.3; R40
2,2',4,5'-TETRACB UNLABELED	(CAS No) 41464-40-8	0.0000000101	R33
2,2',3,5'-TETRACB UNLABELED	(CAS No) 41464-39-5	0.00000001	R33
2,3,3',4,4',5,5'-HEPTACB UNLABELED	(CAS No) 39635-31-9 (EC index no) 602-039-00-4	0.0000000093	R33
OCTACHLORODIBENZOFURAN UNLABELED	(CAS No) 39001-02-0	0.0000000075	Xn; R22 Xi; R36 R53
2,3,4,4',5-PENTACB UNLABELED	(CAS No) 74472-37-0 (EC index no) 602-039-00-4	0.0000000075	Xn; R22 N; R50/53
2,2',3,3',4,5,5',6,6'-NONACB UNLABELED	(CAS No) 52663-77-1 (EC index no) 602-039-00-4	0.0000000072	R33
2',3,4,4',5-PENTACB UNLABELED	(CAS No) 65510-44-3 (EC index no) 602-039-00-4	0.0000000058	R33
3,4,4'-TRICB UNLABELED	(CAS No) 38444-90-5	0.0000000057	Xn; R22 Xi; R41 N; R50/53
2,2',5-TRICB UNLABELED	(CAS No) 37680-65-2 (EC index no) 602-039-00-4	0.0000000056	R33
3,3',4,4',5-PENTACB UNLABELED	(CAS No) 57465-28-8 (EC index no) 602-039-00-4	0.0000000053	R33
3,3',4,4'-TETRACB UNLABELED	(CAS No) 32598-13-3 (EC index no) 602-039-00-4	0.0000000051	R33 N; R50/53

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Name	Product identifier	%	Classification according to Directive 67/548/EEC
2,3',4,4'-TETRABDE (BDE-66) UNLABELED	(CAS No) 189084-61-5	0.0000000048	Carc.Cat.1; R45 Carc.Cat.1; R49 Xn; R22 Xi; R41 Xi; R37 Xi; R38 N; R51/53
3,3',4,4',5,5'-HEXACB UNLABELED	(CAS No) 32774-16-6 (EC index no) 602-039-00-4	0.0000000044	N; R50/53 Xn; R22
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	(CAS No) 19408-74-3	0.0000000041	Carc.Cat.1; R45 Carc.Cat.1; R49 Xn; R20/21/22 R53
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS No) 57117-44-9	0.0000000041	Xn; R22 Xi; R36 R53
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 35822-46-9	0.0000000041	Xn; R22 Xn; R65 R53
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS No) 67562-39-4	0.0000000041	Xn; R22 Xi; R36 R53
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS No) 55673-89-7	0.0000000041	Xn; R22 Xi; R36 R53
3,4,4',5-TETRACB UNLABELED	(CAS No) 70362-50-4 (EC index no) 602-039-00-4	0.0000000041	N; R50/53 R33
2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS No) 57117-31-4	0.000000004	Xn; R22 Xi; R36 R53
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS No) 70648-26-9	0.000000004	Xn; R22 Xi; R36 R53
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED	(CAS No) 72918-21-9	0.000000004	Xn; R22 Xi; R36 R53
2,4,4'-TRIBDE (BDE-28) UNLABELED	(CAS No) 41318-75-6	0.000000004	Carc.Cat.1; R45 Carc.Cat.1; R49 Xn; R22 Xi; R41 Xi; R37 Xi; R38 N; R51/53
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 39227-28-6	0.0000000039	Xn; R22 Xn; R65 R53
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 40321-76-4	0.0000000039	Xn; R22 Xn; R65 R53
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 57652-85-7	0.0000000039	Xn; R22 Xn; R65 R53
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS No) 60851-34-5	0.0000000039	Xn; R22 Xi; R36 R53
2,2',4,4',5,5'-HEXABDE (BDE-153) UNLABELED	(CAS No) 68631-49-2	0.0000000034	Carc.Cat.1; R45 Carc.Cat.1; R49 Xn; R22 Xi; R41 Xi; R37 Xi; R38 N; R51/53

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Name	Product identifier	%	Classification according to Directive 67/548/EEC
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 1746-01-6	0.000000016	Xn; R22 Xn; R65 R53
2,2',4-TRIBDE (BDE-17) UNLABELED	(CAS No) 147217-75-2	0.000000009	Carc. Cat. 1; R45 Carc. Cat. 1; R49 Xn; R22 Xi; R41 Xi; R37 Xi; R38 N; R51/53
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
COD LIVER OIL	(CAS No) 8001-69-2 (EC no) 232-289-6	99.999996813	Not classified
2,2',4,4',5,5'-HEXACB UNLABELED	(CAS No) 35065-27-1 (EC no) 215-648-1	0.000000424	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,4,4',5'-HEXACB UNLABELED	(CAS No) 35065-28-2	0.000000419	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,4,4',5,5'-HEPTACB UNLABELED	(CAS No) 35065-29-3	0.000000025	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4,4',5-PENTACB UNLABELED	(CAS No) 31508-00-6 (EC no) 215-648-1 (EC index no) 602-039-00-4	0.000000167	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',4,4'-TETRABDE (BDE-47) UNLABELED	(CAS No) 5436-43-1	0.000000148	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H336 Aquatic Chronic 2, H411
2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS No) 51207-31-9	0.000000143	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,2',4,5,5'-PENTACB UNLABELED	(CAS No) 37680-73-2	0.000000102	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,3',4,4',5-HEPTACB UNLABELED	(CAS No) 35065-30-6	0.0000000956	STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
2,2',3,4',5,5',6-HEPTACB UNLABELED	(CAS No) 52663-68-0	0.0000000859	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,4',5',6-HEXACB UNLABELED	(CAS No) 38380-04-0	0.0000000819	STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
2,2',3,3',4,4'-HEXACB UNLABELED	(CAS No) 38380-07-3	0.0000000812	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4'-PENTACB UNLABELED	(CAS No) 32598-14-4 (EC index no) 602-039-00-4	0.0000000769	Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4',6-PENTACB UNLABELED	(CAS No) 38380-03-9	0.0000000599	STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
2,2',5,5'-TETRACB UNLABELED	(CAS No) 35693-99-3 (EC index no) 602-039-00-4	0.0000000533	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',4,4',5-PENTACB UNLABELED	(CAS No) 38380-01-7	0.0000000519	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5-HEXACB UNLABELED	(CAS No) 38380-08-4 (EC index no) 602-039-00-4	0.0000000501	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
DECACB UNLABELED	(CAS No) 2051-24-3	0.0000000488	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,4,4'-TRICB UNLABELED	(CAS No) 7012-37-5 (EC no) 230-293-2	0.000000045	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS No) 57117-41-6	0.0000000387	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413

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2,2',4,4',6-PENTABDE (BDE-100) UNLABELED	(CAS No) 189084-64-8	0.0000000357	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411 Carc. 1A, H350
2,2',3,4,4',5,6-HEPTACB UNLABELED	(CAS No) 52663-69-1	0.0000000338	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,3',4,4',5,5'-OCTACB UNLABELED	(CAS No) 35694-08-7	0.0000000302	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',6-HEXACB UNLABELED	(CAS No) 74472-42-7	0.0000000274	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4,4',5,5'-HEXACB UNLABELED	(CAS No) 52663-72-6 (EC index no) 602-039-00-4	0.0000000271	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,4,5,5'-HEXACB UNLABELED		0.0000000256	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,5,5',6-HEXACB UNLABELED	(CAS No) 52663-63-5	0.0000000231	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',4,4',5,6'-HEXABDE (BDE-154) UNLABELED	(CAS No) 207122-15-4	0.0000000229	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H336 Aquatic Chronic 2, H411
2,3',4,4'-TETRACB UNLABELED		0.0000000211	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,3',4',5,6-HEPTACB UNLABELED	(CAS No) 52663-70-4	0.0000000207	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,3',5,5',6-HEPTACB UNLABELED		0.0000000194	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',4,4',5-PENTABDE (BDE-99) UNLABELED	(CAS No) 60348-60-9	0.0000000193	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H336 Aquatic Chronic 2, H411
2,3,3',4,4',5'-HEXACB UNLABELED	(CAS No) 69782-90-7 (EC index no) 602-039-00-4	0.0000000168	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,4,4',5-HEXACB UNLABELED	(CAS No) 35694-06-5	0.0000000143	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,4,4',5-TETRACB UNLABELED	(CAS No) 32690-93-0	0.0000000142	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,3',4,4',5,5',6-NONACB UNLABELED	(CAS No) 40186-72-9	0.000000013	Carc. 1B, H350 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2,3,4,6,7,8,9-OCTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 3268-87-9	0.0000000115	Acute Tox. 2 (Oral), H300 Eye Irrit. 2, H319 Carc. 2, H351
2,2',4,5'-TETRACB UNLABELED	(CAS No) 41464-40-8	0.0000000101	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,5'-TETRACB UNLABELED	(CAS No) 41464-39-5	0.00000001	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5,5'-HEPTACB UNLABELED	(CAS No) 39635-31-9 (EC index no) 602-039-00-4	0.0000000093	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
OCTACHLORODIBENZOFURAN UNLABELED	(CAS No) 39001-02-0	0.0000000075	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,3,4,4',5-PENTACB UNLABELED	(CAS No) 74472-37-0 (EC index no) 602-039-00-4	0.0000000075	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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2,2',3,3',4,5,5',6,6'-NONACB UNLABELED	(CAS No) 52663-77-1 (EC index no) 602-039-00-4	0.0000000072	Carc. 1B, H350 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2',3,4,4',5-PENTACB UNLABELED	(CAS No) 65510-44-3 (EC index no) 602-039-00-4	0.0000000058	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,4,4'-TRICB UNLABELED	(CAS No) 38444-90-5	0.0000000057	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
2,2',5-TRICB UNLABELED	(CAS No) 37680-65-2 (EC index no) 602-039-00-4	0.0000000056	STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
3,3',4,4',5-PENTACB UNLABELED	(CAS No) 57465-28-8 (EC index no) 602-039-00-4	0.0000000053	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,3',4,4'-TETRACB UNLABELED	(CAS No) 32598-13-3 (EC index no) 602-039-00-4	0.0000000051	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4,4'-TETRABDE (BDE-66) UNLABELED	(CAS No) 189084-61-5	0.0000000048	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H336 Aquatic Chronic 2, H411
3,3',4,4',5,5'-HEXACB UNLABELED	(CAS No) 32774-16-6 (EC index no) 602-039-00-4	0.0000000044	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	(CAS No) 19408-74-3	0.0000000041	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Carc. 1A, H350 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS No) 57117-44-9	0.0000000041	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 35822-46-9	0.0000000041	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS No) 67562-39-4	0.0000000041	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS No) 55673-89-7	0.0000000041	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
3,4,4',5-TETRACB UNLABELED	(CAS No) 70362-50-4 (EC index no) 602-039-00-4	0.0000000041	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS No) 57117-31-4	0.000000004	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS No) 70648-26-9	0.000000004	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED	(CAS No) 72918-21-9	0.000000004	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,4,4'-TRIBDE (BDE-28) UNLABELED	(CAS No) 41318-75-6	0.000000004	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H336 Aquatic Chronic 2, H411
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 39227-28-6	0.0000000039	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 40321-76-4	0.0000000039	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 57652-85-7	0.0000000039	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS No) 60851-34-5	0.0000000039	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,2',4,4',5,5'-HEXABDE (BDE-153) UNLABELED	(CAS No) 68631-49-2	0.0000000034	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H336 Aquatic Chronic 2, H411
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 1746-01-6	0.0000000016	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,2',4-TRIBDE (BDE-17) UNLABELED	(CAS No) 147217-75-2	0.0000000009	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H336 Aquatic Chronic 2, H411

Name	Product identifier	%	Classification (GHS-US)
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 35822-46-9	0.0000000041	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 39227-28-6	0.0000000039	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 40321-76-4	0.0000000039	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 57652-85-7	0.0000000039	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 1746-01-6	0.0000000016	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
First-aid measures after inhalation	: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
First-aid measures after skin contact	: Wash with soap and plenty of water. Consult a physician.
First-aid measures after eye contact	: Flush eyes with water as a precaution.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

No additional information available

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

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

No additional information available

### 5.3. Advice for firefighters

Firefighting instructions	: The product itself does not burn.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.



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### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

Emergency procedures : Avoid dust formation. Avoid breathing vapors, mist or gas.

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

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

For containment : Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store at room temperature away from light and moisture.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 2,2',5,5'-TETRACB UNLABELED (35693-99-3)

USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	0.5000000000 mg/m <sup>3</sup>
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#### 8.2. Exposure controls

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Hand protection : Wear suitable protective clothing and gloves.

Eye protection : Wear safety glasses with side shields (or goggles) and a face shield.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : When appropriate, use NIOSH/CEN approved respirator.

### SECTION 9: Physical and chemical properties

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

*The properties listed below are for the solvent, the main component of this mixture.*

Physical state : Liquid  
Appearance : Liquid. Oily.  
Color : yellow.  
Odor : slight fishy odor.  
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 : 260 °C  
Self ignition temperature : No data available  
Decomposition temperature : No data available

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

No additional information available

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>1,2,3,4,6,7,8,9-OCTACHLORODIBENZO-P-DIOXIN UNLABELED (3268-87-9)</b>	
ATE (oral)	5.000 mg/kg body weight
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED (67562-39-4)</b>	
ATE (oral)	500.000 mg/kg body weight
<b>OCTACHLORODIBENZOFURAN UNLABELED (39001-02-0)</b>	
ATE (oral)	500.000 mg/kg body weight
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED (72918-21-9)</b>	
ATE (oral)	500.000 mg/kg body weight
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (60851-34-5)</b>	
ATE (oral)	500.000 mg/kg body weight
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED (55673-89-7)</b>	
ATE (oral)	500.000 mg/kg body weight
<b>3,4,4',5-TETRACB UNLABELED (70362-50-4)</b>	
	LD50 - Oral - guinea pig - 1 mg/kg
<b>COD LIVER OIL (8001-69-2)</b>	
LD50 oral	> 2000 mg/kg
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)</b>	
ATE (oral)	500.000 mg/kg body weight
<b>2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED (51207-31-9)</b>	
ATE (oral)	500.000 mg/kg body weight

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<b>1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (19408-74-3)</b>	
ATE (oral)	500.000 mg/kg body weight
ATE (dermal)	1100.000 mg/kg body weight
ATE (gases)	4500.000 ppmV/4h
ATE (vapors)	11.000 mg/l/4h
ATE (dust, mist)	1.500 mg/l/4h

<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)</b>	
ATE (oral)	500.000 mg/kg body weight

<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)</b>	
ATE (oral)	500.000 mg/kg body weight

<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)</b>	
ATE (oral)	500.000 mg/kg body weight

<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-41-6)</b>	
ATE (oral)	500.000 mg/kg body weight

<b>2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-31-4)</b>	
ATE (oral)	500.000 mg/kg body weight

<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED (70648-26-9)</b>	
ATE (oral)	500.000 mg/kg body weight

<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (57117-44-9)</b>	
ATE (oral)	500.000 mg/kg body weight

<b>3,4,4'-TRICB UNLABELED (38444-90-5)</b>	
ATE (oral)	500.000 mg/kg body weight

<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)</b>	
ATE (oral)	500.000 mg/kg body weight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>2,2',5-TRICB UNLABELED (37680-65-2)</b>	
LC50 fish 1	0.034 mg/l Pimephales promelas (fathead minnow) - 96 h

<b>3,3',4,4'-TETRACB UNLABELED (32598-13-3)</b>	
LC50 fish 1	> 0.002 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	> 0.002 mg/l Daphnia magna (Water flea) - 48 h
NOEC (chronic)	0.1 mg/l Oncorhynchus mykiss (rainbow trout) - 7 d

<b>3,4,4',5-TETRACB UNLABELED (70362-50-4)</b>	
LC50 fish 1	Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	Daphnia magna (Water flea) - 48 h
NOEC (chronic)	0.1 mg/l Oncorhynchus mykiss (rainbow trout) - 7 d

<b>2,2',5,5'-TETRACB UNLABELED (35693-99-3)</b>	
LC50 fish 1	Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	Daphnia magna (Water flea) - 48 h
NOEC (chronic)	0.1 mg/l Oncorhynchus mykiss (rainbow trout) - 7 d

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<b>2,2',4,5'-TETRACB UNLABELED (41464-40-8)</b>	
LC50 fish 1	0.002 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	0.002 mg/l Daphnia magna (Water flea) - 48 h
NOEC (chronic)	0.1 mg/l Oncorhynchus mykiss (rainbow trout) - 7 d

<b>2,2',4,4',5,5'-HEXACB UNLABELED (35065-27-1)</b>	
LC50 fish 1	Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	Daphnia magna (Water flea) - 48 h

<b>3,4,4'-TRICB UNLABELED (38444-90-5)</b>	
LC50 fish 1	0.034 mg/l Pimephales promelas (fathead minnow) - 96 h

<b>2,2',3,3',4,4',5-HEPTACB UNLABELED (35065-30-6)</b>	
LC50 fish 1	0.034 mg/l Pimephales promelas (fathead minnow) - 96 h

<b>2,4,4'-TRICB UNLABELED (7012-37-5)</b>	
LC50 fish 1	> 0.16 mg/l Pimephales promelas (fathead minnow) - 96h
EC50 Daphnia 1	> 0.16 mg/l Daphnia magna (Water flea) - 48h

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

<b>2,2',5-TRICB UNLABELED (37680-65-2)</b>	
Log Pow	5.56

<b>3,3',4,4'-TETRACB UNLABELED (32598-13-3)</b>	
Bioconcentration factor (BCF REACH)	81.5
Bioaccumulative potential	Bioaccumulation: Oryzias latipes - 20 d Bioconcentration factor (BCF): 81.5.

<b>2,3',4,4',5-PENTACB UNLABELED (31508-00-6)</b>	
Log Pow	7.12

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## 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.

## SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

### 14.1. UN number

Not applicable

### 14.2. UN proper shipping name

Not applicable

### 14.3. Additional information

Other information : No supplementary information available.

Special transport precautions : Not dangerous goods.

### Overland transport

No additional information available

### Transport by sea

No additional information available

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### Air transport

No additional information available

### 14.4. Environmental hazards

Other information : No supplementary information available.

### 14.5. Special precautions for user

Special transport precautions : Not dangerous goods.

### 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

#### 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

#### FORTIFIED COD LIVER OIL REFERENCE MATERIAL

Listed on the Canadian DSL (Domestic Substances List) inventory.

#### 15.2.1. National regulations

No additional information available

### 15.3. US State regulations

#### FORTIFIED COD LIVER OIL REFERENCE MATERIAL()

State or local regulations

U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)

WARNING! This product contains a chemical known by the state of California to cause cancer, birth defects or other reproductive harm.

#### 1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)

WARNING! This product contains a chemical known by the state of California to cause cancer, birth defects or other reproductive harm.

#### 1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)

WARNING! This product contains a chemical known by the state of California to cause cancer, birth defects or other reproductive harm.

# FORTIFIED COD LIVER OIL REFERENCE MATERIAL EDF-5462

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### 1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)

WARNING! This product contains a chemical known by the state of California to cause cancer, birth defects or other reproductive harm.

### 1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)

WARNING! This product contains a chemical known by the state of California to cause cancer, birth defects or other reproductive harm.

## 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. 2 (Oral)	Acute toxicity (oral) Category 2
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) 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. 1B	Carcinogenicity Category 1B
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
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 3	Specific target organ toxicity (single exposure) Category 3
H300	Fatal if swallowed
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
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H350	May cause cancer
H351	Suspected of causing cancer
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
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R22	Harmful if swallowed
R28	Very toxic if swallowed
R33	Danger of cumulative effects
R36	Irritating to eyes
R36/37/38	Irritating to eyes, respiratory system 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

# FORTIFIED COD LIVER OIL REFERENCE MATERIAL EDF-5462

## Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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
R49	May cause cancer by inhalation
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
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
R65	Harmful: may cause lung damage if swallowed
N	Dangerous for the environment
T+	Very toxic
Xi	Irritant
Xn	Harmful

NFPA health hazard

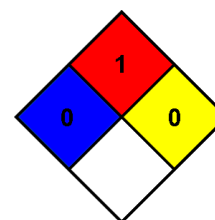
: 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard

: 1 - Must be preheated before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

Health

: 0 Minimal Hazard - No significant risk to health

Flammability

: 1 Slight Hazard

Physical

: 0 Minimal Hazard

CIL 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*