



TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%) 50 UG/ML IN TOLUENE

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: 21/03/2017

Revision date:

Version: 1.0

DLM-9945-S

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

1.1. Product identifier

Product form : Mixtures
Product name : TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%) 50 UG/ML IN TOLUENE
Product code : DLM-9945-S

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 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
Repr. 2 H361
STOT SE 3 H336
STOT RE 2 H373
Asp. Tox. 1 H304

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

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

Repr.Cat.3; R62
Repr.Cat.3; R63
F; R11
Xn; R65
Xn; R48/20
Xi; R38
N; R51/53
R67

Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 2 H225
Skin Irrit. 2 H315
Repr. 2 H361
STOT SE 3 H336
STOT RE 2 H373
Asp. Tox. 1 H304

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Aquatic Acute 2 H401

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling 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 vapour
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H336 - May cause drowsiness or dizziness
H361 - Suspected of damaging the unborn child (if inhaled, if swallowed, oral, in contact with skin)
H373 - May cause damage to organs (urinary bladder, liver, kidneys, brain) through prolonged or repeated exposure (if inhaled, if swallowed, inhalation, oral)

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 equipment
P260 - Do not breathe gas, fume, mist, spray, vapours
P264 - Wash hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective clothing, protective gloves

GHS-US labelling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H225 - Highly flammable liquid and vapour
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H336 - May cause drowsiness or dizziness
H361 - Suspected of damaging the unborn child (Dermal, Inhalation, oral)
H373 - May cause damage to organs (urinary bladder, liver, kidneys, brain) through prolonged or repeated exposure (Dermal, Inhalation, oral)
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 sparks, open flames, hot surfaces, heat. - No smoking
P233 - Keep container tightly closed
P240 - Ground/Bond container and receiving equipment
P241 - Use explosion-proof electrical equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P260 - Do not breathe vapours, spray, mist, gas, fume
P261 - Avoid breathing spray, vapours, gas, fume
P264 - Wash hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P280 - Wear protective gloves, protective clothing

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P301+P310 - If swallowed: Immediately call a doctor
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
P308+P313 - If exposed or concerned: Get medical advice/attention
P312 - Call a doctor if you feel unwell
P314 - Get medical advice/attention if you feel unwell
P321 - Specific treatment (see Hazardous component(s) for labelling on this label)
P331 - Do NOT induce vomiting
P332+P313 - If skin irritation occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P370+P378 - In case of fire: Use D-powder, carbon dioxide (CO₂), alcohol resistant foam 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 hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

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
TOLUENE UNLABELED	(CAS No) 108-88-3 (EC No) 203-625-9 (EC Index No) 601-021-00-3 (REACH-no) 01-2119471310-51	99.9942	F; R11 Xi; R38 Xn; R65 Repr.Cat.3; R62 Repr.Cat.3; R63 R67 N; R51/53 Xn; R48/20
TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%)	(CAS No) 1794752-19-4	0.0058	Not classified

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
TOLUENE UNLABELED	(CAS No) 108-88-3 (EC No) 203-625-9 (EC Index No) 601-021-00-3 (REACH-no) 01-2119471310-51	99.9942	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%)	(CAS No) 1794752-19-4	0.0058	Not classified

Name	Product identifier	%	GHS-US classification
TOLUENE UNLABELED	(CAS No) 108-88-3	99.9942	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
TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%)	(CAS No) 1794752-19-4	0.0058	Not classified

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

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First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Wash immediately with lots of water. Get medical advice/attention. Specific treatment (see Hazard pictograms (CLP) on this label).
First-aid measures after eye contact	: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
First-aid measures after ingestion	: Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries after inhalation	: May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways.

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

No additional information available

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry chemical. Alcohol resistant foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapour.
Explosion hazard	: May form flammable/explosive vapour-air mixture.
Reactivity	: Vapors may form explosive mixture with air.

5.3. Advice for firefighters

Firefighting instructions	: Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Wear self-contained breathing apparatus, rubber boots and thick rubber gloves.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Use personal protective equipment as required. Avoid breathing dust, mist, spray. Ensure adequate air ventilation. Remove all sources of ignition.

6.1.2. For emergency responders

Protective equipment : Avoid breathing Dust, vapours.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not discharge the product into the environment.

6.3. Methods and material for containment and cleaning up

For containment : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Stop leak without risks if possible. Contain large spillage with sand or earth.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	: No open flames. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist, spray, dust, vapours. Use only outdoors or in a well-ventilated area.
Hygiene measures	: Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Comply with applicable regulations. Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Store refrigerated (-5°C to 5°C). Protect from light.
Incompatible materials	: Heat sources.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%) 50 UG/ML IN TOLUENE		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm Visual impairment, Female reproductive, Pregnancy loss
TOLUENE UNLABELED (108-88-3)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm Visual impairment, Female reproductive, Pregnancy loss
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm 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

8.2. Exposure controls

- Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
- Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



- Materials for protective clothing : Wear suitable protective clothing and gloves.
- 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 : Wear suitable protective clothing.
- Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear respiratory protection.

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.
Molecular mass	: 92.14 g/mol
Colour	: Colourless.
Odour	: No data available.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -93 °C (-135 °F)
Freezing point	: No data available
Boiling point	: 110 - 111 °C (230 - 232 °F)
Flash point	: 4 °C (39.2 °F) - closed cup
Auto-ignition temperature	: 535 °C (995 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapour
Vapour pressure	: 29.1 hPa (21.8 mmHg) at 20.0 °C (68.0 °F)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.865 g/ml at 25 °C (77 °F)
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

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Oxidising properties : No data available
Explosive limits : 1.2 - 7 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapors may form explosive mixture with air.

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

May form flammable/explosive vapour-air mixture.

10.4. Conditions to avoid

Open flame. Direct sunlight.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%) 50 UG/ML IN TOLUENE	
LD50 oral rat	> 5580 mg/kg
LD50 dermal rabbit	12196 mg/kg
LC50 inhalation rat (mg/l)	12500 - 28800 mg/m ³ 4 h
ATE CLP (dermal)	12196.000 mg/kg bodyweight
ATE CLP (vapours)	12.500 mg/l/4h
ATE CLP (dust,mist)	12.500 mg/l/4h

TOLUENE UNLABELED (108-88-3)	
LD50 oral rat	> 5580 mg/kg
LD50 dermal rabbit	12196 mg/kg
LC50 inhalation rat (mg/l)	12500 - 28800 mg/m ³ 4 h
ATE CLP (dermal)	12196.000 mg/kg bodyweight
ATE CLP (vapours)	12.500 mg/l/4h
ATE CLP (dust,mist)	12.500 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Skin - rabbit - Skin irritation - 24 h

Serious eye damage/irritation : Not classified
No data available

Respiratory or skin sensitisation : Not available
No data available

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Experiments have shown reproductive toxicity effects in male and female laboratory animals.
STOT-single exposure : May cause drowsiness or dizziness.
No data available

STOT-repeated exposure : May cause damage to organs (urinary bladder, liver, kidneys, brain) through prolonged or repeated exposure (if inhaled, if swallowed, inhalation, oral).
No data available

Aspiration hazard : May be fatal if swallowed and enters airways.

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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. Lung irritation, chest pain, pulmonay edema, Inhalation studies have shown the development of inflammatory and ulcerous lesions of the penis, prepuce, and scrotom in animals.
IARC group	: 3
Symptoms/injuries after inhalation	: May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%) 50 UG/ML IN TOLUENE	
LC50 fish 1	74 - 340 mg/l <i>Lepomis macrochirus</i> (Bluegill) - 96h
LC50 other aquatic organisms 1	10 mg/l <i>Pseudokirchneriella subcapitata</i> (Green algae) - 24 h
EC50 Daphnia 1	8 mg/l <i>Daphnia magna</i> (Water flea) - 24h
LC50 fish 2	7.63 mg/l <i>Oncorhynchus mykiss</i> (Rainbow trout) - 96 h
EC50 Daphnia 2	6 mg/l <i>Daphnia magna</i> (Water flea) - Immobilization - 48 h
ErC50 (algae)	245 mg/l <i>Chlorella vulgaris</i> (Fresh water algae) - 24 h
LOEC (chronic)	8.04 mg/l <i>Pimephales promelas</i> (Fathead minnow) - 7 d
NOEC (chronic)	5.44 mg/l <i>Pimephales promelas</i> (fathead minnow) - 7 d

TOLUENE UNLABELED (108-88-3)	
LC50 fish 1	74 - 340 mg/l <i>Lepomis macrochirus</i> (Bluegill) - 96h
LC50 other aquatic organisms 1	10 mg/l <i>Pseudokirchneriella subcapitata</i> (Green algae) - 24 h
EC50 Daphnia 1	8 mg/l <i>Daphnia magna</i> (Water flea) - 24h
LC50 fish 2	7.63 mg/l <i>Oncorhynchus mykiss</i> (Rainbow trout) - 96 h
EC50 Daphnia 2	6 mg/l <i>Daphnia magna</i> (Water flea) - Immobilization - 48 h
ErC50 (algae)	245 mg/l <i>Chlorella vulgaris</i> (Fresh water algae) - 24 h
LOEC (chronic)	8.04 mg/l <i>Pimephales promelas</i> (Fathead minnow) - 7 d
NOEC (chronic)	5.44 mg/l <i>Pimephales promelas</i> (fathead minnow) - 7 d

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

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

Other adverse effects	: Environmental precautions. Toxic to aquatic life with long lasting 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.

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SECTION 14: Transport information

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

14.1. UN number

UN-No.(DOT) : 1294
DOT NA no. UN1294

14.2. UN proper shipping name

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



Packing group (DOT) : II - Medium Danger
DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). 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.
T4 - 2.65 178.274(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) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242

14.3. Additional information

Other information : No supplementary information available.

Overland transport

Hazard identification number (Kemler No.) : 33
Orange plates :



Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) : 1I
EAC code : 3YE
Excepted quantities (ADR) : E2

Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
MFAG-No : 130

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
Civil Aeronautics Law : Flammable liquids

14.4. Environmental hazards

Other information : No supplementary information available.

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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

TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%) 50 UG/ML IN TOLUENE	
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

TOLUENE UNLABELED (108-88-3)

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

15.2. International regulations

CANADA

TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%) 50 UG/ML IN TOLUENE	
Listed on the Canadian DSL (Domestic Substances List)	
TOLUENE UNLABELED (108-88-3)	
Listed on the Canadian DSL (Domestic Substances List)	

15.2.1. National regulations

No additional information available

15.3. US State regulations

TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%) 50 UG/ML IN TOLUENE()				
U.S. - California - Proposition 65 - Carcinogens List	No			
U.S. - California - Proposition 65 - Developmental Toxicity	Yes			
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No			
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No			
No significant risk level (NSRL)	7000			
State or local regulations	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			
TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%) (1794752-19-4)				
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	7000

TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%) 50 UG/ML IN TOLUENE

DLM-9945-S

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

TOLUENE UNLABELED (108-88-3)				
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	7000

TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%) (1794752-19-4)
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.

TOLUENE UNLABELED (108-88-3)
State or local regulations
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

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.

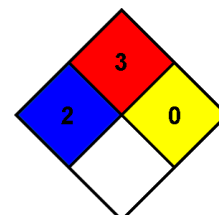
Full text of R-, H- and EUH-statements:

Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
R11	Highly flammable
R38	Irritating to skin
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R51/53	Toxic to aquatic organisms, 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	Vapours may cause drowsiness and dizziness
F	Highly flammable
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

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.



TBB (2-ETHYLHEXYL-2,3,4,5-TETRABROMOBENZOATE) (D17, 98%) 50 UG/ML IN TOLUENE

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HMIS III Rating

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