

PHT4 DIOL LV

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

1.1 Product identifier

Trade name : PHT4-DIOL LV

Substance name : 2-(2-hydroxyethoxy)ethyl 2-hydroxypropyl 3,4,5,6-tetrabromophthalate

EC-No. : 243-885-0

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

Use of the Substance/Mixture : Fire retardant

Recommended restrictions on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company: Everchem Specialty Chemicals
Rose Tree Corporate Center
1400 N. Providence Rd.
Suite 302
Media, PA 19063
Ph. 484-234-5030
Fx: 484-234-5037

1.4 Emergency telephone number

Chemtrec: 1800-424-9300

For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard statements : Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Not a hazardous substance or mixture.

Additional Labeling:

EUH210 .Safety data sheet available on request.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Hazardous components

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled : Remove to fresh air.
Get medical attention.

In case of skin contact : Wash skin thoroughly with soap and water for at least 15 minutes.
If skin irritation occurs: Get medical advice/ attention.

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- In case of eye contact : Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- If swallowed : If conscious, make the victim drink the following:
Drink 1 or 2 glasses of water.
Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : None known.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Burning produces noxious and toxic fumes.
Thermal decomposition can lead to release of irritating gases and vapours.

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions : Use personal protective equipment.

6.2 Environmental precautions

- Environmental precautions : Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Pick up and transfer to properly labelled containers.
Clean contaminated surface thoroughly.

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6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice.
Use personal protective equipment as required. Avoid contact with skin, eyes and clothing.
Do not breathe vapours or spray mist. Use only in well-ventilated areas.

Hygiene measures : Wash thoroughly after handling. Wash contaminated clothing before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage : Keep in a dry, cool and well-ventilated place. Keep container areas and containers tightly closed. Protect from contamination.

Other data : Stable under recommended storage conditions.

7.3 Specific end use(s)

Specific use(s) : Raw material for industry

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

8.2 Exposure controls

Engineering measures

Use with local exhaust ventilation.

Personal protective equipment

Eye protection : Safety glasses with side-shields or
Safety goggles

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Hand protection

: Rubber gloves
Neoprene gloves

Skin and body protection : Impervious clothing

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
Respirator with filter for organic vapour

Environmental exposure controls

General advice : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : light brown

Odour : mild

Odour Threshold : No data available

pH : Not applicable

Melting point/range : Not applicable

Boiling point/boiling range : Decomposes

Flash point : The product is not flammable.

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : 0.001 hPa (60 °C)

Relative vapour density : 21.6

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Relative density	:	1.9
Solubility(ies)		
Water solubility	:	< 0.1 mg/l
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Thermal decomposition	:	No data available

Viscosity

Viscosity, dynamic : 20,000 - 30,000 mPa.s (25 °C)

Viscosity, kinematic : No data available

9.2 Other information

Self-Accelerating decomposition temperature (SADT) : Method: No information available.

Oxidizing potential : No information available.

SECTION 10: Stability and reactivity**10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Conditions to avoid : High temperatures.

10.5 Incompatible materials

Materials to avoid : Acids

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Bases
Oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon oxides
Hydrogen bromide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Acute inhalation toxicity : Remarks: Not classified due to lack of data.
Acute dermal toxicity : LD50 (Rabbit, male and female): > 5,000 mg/kg

Components:

2,2'-oxydiethanol:

Acute oral toxicity : Acute toxicity estimate : 500 mg/kg
Method: Converted acute toxicity point estimate
LD50 (Rat): 12,565 - 30,210 mg/kg
Acute inhalation toxicity : LC50 (Rat): > 4.4 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.
Acute dermal toxicity : LD50 (Rabbit): 12,500 - 13,300 mg/kg

Skin corrosion/irritation

Product:

Species: Rabbit
Exposure time: 24 h
Result: No skin irritation

Serious eye damage/eye irritation

Product:

Species: Rabbit

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Result: No eye irritation

Respiratory or skin sensitisation

Product:

Remarks: Not classified due to lack of data.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Test Type: Ames test
Result: negative

Germ cell mutagenicity Assessment : Not classified due to lack of data.

Carcinogenicity

Product:

Carcinogenicity Assessment : Not classified due to lack of data.

Reproductive toxicity

Product:

Reproductive toxicity Assessment : Not classified due to lack of data.

STOT - single exposure

Product:

Assessment: Not classified due to lack of data.

STOT - repeated exposure

Product:

Assessment: Not classified due to lack of data.

Aspiration toxicity

Product:

No aspiration toxicity classification

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SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 12 mg/l
Exposure time: 96 h
Test Type: static test

Components:

2,2'-oxydiethanol:

Toxicity to fish : LC50 (Fish): 75,200 mg/l
Exposure time: 96 h

LC50 (Fish): > 32,000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 84,770 mg/l
Exposure time: 48 h

12.2 Persistence and degradability

Product:

Biodegradability : Result: Not readily biodegradable.

12.3 Bioaccumulative potential

Components:

2,2'-oxydiethanol:

Partition coefficient: n-octanol/water : log Pow: -2

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

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Additional ecological information : Remarks: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors

Neither banned nor restricted

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Restrictions on the marketing and use of certain dangerous substances and preparations

Neither banned nor restricted

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

Neither banned nor restricted

Candidate List of Substances of Very High Concern for Authorisation

Neither banned nor restricted

Major Accident Hazard Legislation

Seveso Directive

Directive 96/82/EC does not apply

Please note that Section 3 of this document lists only the hazardous components required by the specific country or region hazard communication regulations. The chemical identifiers listed in Section 3 are used globally for hazard communication purposes and may not reflect those used for chemical inventory coverage in a particular country or region. The chemical inventory information given in Section 15 of this document applies to the product as a whole and should be used when evaluating inventory compliance.

The components of this product are reported in the following inventories:

DSL	: All components of this product are on the Canadian DSL
AICS	: On the inventory, or in compliance with the inventory
NZIoC	: Not in compliance with the inventory
ENCS	: Not in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
TCSI	: On the inventory, or in compliance with the inventory
US.TSCA	: On TSCA Inventory

15.2 Chemical safety assessment

No information available.

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SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

Emergency Phone Number

<u>Europe:</u>	All European Countries	+44 (0) 1235 239 670 (NCEC)
<u>Asia Pacific:</u>	East / South East Asia – Regional Number	+65 3158 1074 (NCEC)
	Australia	+61 2 8014 4558
	New Zealand	+64 9929 1483 (NCEC)
	China	+86 512 8090 3042 (NCEC)
	Taiwan	+886 2 8793 3212 (NCEC)
	Japan	+81 3 4578 9341 (NCEC)
	Indonesia	007 803 011 0293 (NCEC)
	Malaysia	+60 3 6207 4347 (NCEC)
	Thailand	001 800 120 666 751 (NCEC)
	Korea	+65 3158 1285 (NCEC)
	Vietnam	+84 8 4458 2388 (NCEC)
	India	+65 3158 1198 (NCEC)
	Pakistan	+65 3158 1329 (NCEC)
	Philippines	+65 3158 1203 (NCEC)
	Sri Lanka	+65 3158 1195 (NCEC)
	Bangladesh	+65 3158 1200 (NCEC)
<u>Middle East / Africa:</u>		+44 (0) 1235 239 671 (NCEC)
<u>North America</u>	United States of America (USA)	(800) 424-9300 (CHEMTREC)
	Canada	(800) 424-9300 (CHEMTREC)
<u>Latin America</u>	Mexico	+52 555 004 8763 (NCEC)
	Brazil	+55 11 3197 5891 (NCEC)
	Chile	+56 2 2582 9336 (NCEC)
	All other countries	+44 (0) 1235 239 670 (NCEC)