

1 Identification

- **Product identifier**
- **Product Name:** Phthalates in Polyethylene Standard w/BPA
- **Part Number:** CRM-PE002
- **Application of the substance / the mixture** Certified Reference Material
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SPEX CertiPrep, LLC.
203 Norcross Ave, Metuchen,
NJ 08840 USA
- **Information department:** product safety department
- **Emergency telephone number:**
Emergency Phone Number (24 hours)
CHEMTREC (800-424-9300)
Outside US: 703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.
Repr. 1 H360 May damage fertility or the unborn child.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**

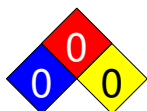


GHS07



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
dimethyl phthalate
BBP
dibutyl phthalate
bis(2-ethylhexyl) phthalate
- **Hazard statements**
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H360 May damage fertility or the unborn child.
- **Precautionary statements**
Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection.
Specific treatment (see on this label).
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 0
Reactivity = 0

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· **HMIS-ratings (scale 0 - 4)**

HEALTH 0

Health = 0

FIRE 0

Fire = 0

REACTIVITY 0

Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

117-84-0	Di-n-octyl Phthalate	0.3%
80-05-7	bisphenol A	0.3%
85-68-7	BBP	0.3%
84-74-2	dibutyl phthalate	0.3%
117-81-7	bis(2-ethylhexyl) phthalate	0.3%

· **Chemical identification of the substance/preparation**

9002-88-4	Polyethylene low density	91.9%
28553-12-0	di-"isononyl" phthalate	3.0%
26761-40-0	di-"isodecyl" phthalate	3.0%
84-66-2	diethyl phthalate	0.3%
131-11-3	dimethyl phthalate	0.3%

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for Doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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· Protective Action Criteria for Chemicals

· PAC-1:

9002-88-4	Polyethylene low density	16 mg/m ³
117-84-0	Di-n-octyl Phthalate	41 mg/m ³
84-66-2	diethyl phthalate	15 mg/m ³
131-11-3	dimethyl phthalate	15 mg/m ³
80-05-7	bisphenol A	15 mg/m ³
85-68-7	BBP	15 mg/m ³
84-74-2	dibutyl phthalate	15 mg/m ³
117-81-7	bis(2-ethylhexyl) phthalate	10 mg/m ³

· PAC-2:

9002-88-4	Polyethylene low density	170 mg/m ³
117-84-0	Di-n-octyl Phthalate	450 mg/m ³
84-66-2	diethyl phthalate	300 mg/m ³
131-11-3	dimethyl phthalate	1,600 mg/m ³
80-05-7	bisphenol A	110 mg/m ³
85-68-7	BBP	77 mg/m ³
84-74-2	dibutyl phthalate	1,600 mg/m ³
117-81-7	bis(2-ethylhexyl) phthalate	1,000 mg/m ³

· PAC-3:

9002-88-4	Polyethylene low density	1,000 mg/m ³
117-84-0	Di-n-octyl Phthalate	11000* mg/m ³
84-66-2	diethyl phthalate	1,800 mg/m ³
131-11-3	dimethyl phthalate	9300* mg/m ³
80-05-7	bisphenol A	650 mg/m ³
85-68-7	BBP	460 mg/m ³
84-74-2	dibutyl phthalate	9300* mg/m ³
117-81-7	bis(2-ethylhexyl) phthalate	6,100 mg/m ³

7 Handling and storage

· Handling:

- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.

· Conditions for safe storage, including any incompatibilities

· Storage:

- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

· Control parameters

· Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

84-74-2 dibutyl phthalate

PEL Long-term value: 5 mg/m³

REL Long-term value: 5 mg/m³

TLV Long-term value: 5 mg/m³

117-81-7 bis(2-ethylhexyl) phthalate

PEL Long-term value: 5 mg/m³

REL Short-term value: 10 mg/m³

Long-term value: 5 mg/m³

See Pocket Guide App. A

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TLV Long-term value: 5 mg/m³

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:** Wash hands before breaks and at the end of work.

· **Breathing equipment:** Not required.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Liquid

Color: According to product specification

· **Odor:** Characteristic

· **Odour Threshold:** Not applicable.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:**

Decomposition temperature: Not applicable.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: Not applicable.

Upper: Not applicable.

· **Vapor pressure:** Not determined.

· **Density** Not applicable.

· **Relative density** Not applicable.

· **Vapor density** Not applicable.

· **Evaporation rate** Not applicable.

· **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not applicable.

· **Viscosity:**

Dynamic: Not applicable.

Kinematic: Not applicable.

· **Solvent content:**

Organic solvents: 0.0 %

Solids content: 95.2 %

· **Other information** No further relevant information available.

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10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

85-68-7 BBP

Oral	LD50	2330 mg/kg (rat)
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84-74-2 dibutyl phthalate

Oral	LD50	8000 mg/kg (rat)
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Dermal	LD50	20000 mg/kg (rabbit)
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117-81-7 bis(2-ethylhexyl) phthalate

Oral	LD50	30600 mg/kg (rat)
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Dermal	LD50	25000 mg/kg (rabbit)
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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

9002-88-4	Polyethylene low density	3
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85-68-7	BBP	3
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117-81-7	bis(2-ethylhexyl) phthalate	2B
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- **NTP (National Toxicology Program)**

117-81-7	bis(2-ethylhexyl) phthalate	R
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- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number · DOT, ADR, IMDG, IATA	Not Regulated
· UN proper shipping name · DOT, ADR, IMDG, IATA	Not Regulated
· Transport hazard class(es) · DOT, ADR, IMDG, IATA · Class	Not Regulated
· Packing group · DOT, ADR, IMDG, IATA	Not Regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	Not Regulated

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· Section 355 (extremely hazardous substances):	None of the ingredients is listed.
· Section 313 (Specific toxic chemical listings):	
131-11-3	dimethyl phthalate
80-05-7	bisphenol A
84-74-2	dibutyl phthalate
117-81-7	bis(2-ethylhexyl) phthalate
· TSCA (Toxic Substances Control Act):	All ingredients are listed.
· Proposition 65	
· Chemicals known to cause cancer:	
28553-12-0	di-"isononyl" phthalate
117-81-7	bis(2-ethylhexyl) phthalate
· Chemicals known to cause reproductive toxicity for females:	
80-05-7	bisphenol A
84-74-2	dibutyl phthalate
· Chemicals known to cause reproductive toxicity for males:	
84-74-2	dibutyl phthalate
117-81-7	bis(2-ethylhexyl) phthalate
· Chemicals known to cause developmental toxicity:	
26761-40-0	di-"isodecyl" phthalate
85-68-7	BBP
84-74-2	dibutyl phthalate
117-81-7	bis(2-ethylhexyl) phthalate

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· **Carcinogenic categories**

· EPA (Environmental Protection Agency)		
84-66-2	diethyl phthalate	D
131-11-3	dimethyl phthalate	D
85-68-7	BBP	C
84-74-2	dibutyl phthalate	D
117-81-7	bis(2-ethylhexyl) phthalate	B2

· **TLV (Threshold Limit Value established by ACGIH)**

84-66-2	diethyl phthalate	A4
117-81-7	bis(2-ethylhexyl) phthalate	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

117-81-7	bis(2-ethylhexyl) phthalate	
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· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).· **Hazard pictograms**

GHS07

GHS08

· **Signal word** Danger· **Hazard-determining components of labeling:**

dimethyl phthalate

BBP

dibutyl phthalate

bis(2-ethylhexyl) phthalate

· **Hazard statements**

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** product safety department· **Contact:**

SPEX CertiPrep, LLC.

1-732-549-7144

· **Date of preparation / last revision** 01/19/2017 / -· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Sens. 1: Skin sensitisation – Category 1

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Carc. 2: Carcinogenicity – Category 2
Repr. 1: Reproductive toxicity – Category 1

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