

1 Identification

- **Product identifier**
- **Product Name:** Phthalates in Polyethylene Standard w/BPA
- **Part Name:** 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
732-549-7144
USMet-CRMSales@antylia.com
- **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

Carcinogenicity 2 H351 Suspected of causing cancer.
Toxic to Reproduction 1B H360 May damage fertility or the unborn child.



GHS07

Sensitization - Skin 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:**
bis(2-ethylhexyl) phthalate
bisphenol A
dibutyl phthalate
BBP
- **Hazard statements**
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H360 May damage fertility or the unborn child.
- **Precautionary statements**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 If on skin: Wash with plenty of water.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P321 Specific treatment (see on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Product Name: Phthalates in Polyethylene Standard w/BPA

(Contd. of page 1)

- Classification system:
- NFPA ratings (scale 0 - 4)



- HMIS-ratings (scale 0 - 4)



- 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:

80-05-7	bisphenol A	0.3%
84-74-2	dibutyl phthalate	0.3%
85-68-7	BBP	0.3%
117-81-7	bis(2-ethylhexyl) phthalate	0.3%
117-84-0	Di-n-octyl Phthalate	0.3%
131-11-3	dimethyl phthalate	0.3%

· Chemical identification of the substance/preparation

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

4 First-aid measures

- Description of first aid measures
- After inhalation:
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Do not give anything to eat or drink - Do not induce vomiting
- 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: Use fire fighting measures that suit the environment.
- 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 to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- Reference to other sections
See Section 7 for information on safe handling.

(Contd. on page 3)

Product Name: Phthalates in Polyethylene Standard w/BPA

(Contd. of page 2)

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Protective Action Criteria for Chemicals

PAC-1:		
9002-88-4	Polyethylene low density	16 mg/m ³
80-05-7	bisphenol A	15 mg/m ³
84-66-2	diethyl phthalate	15 mg/m ³
84-74-2	dibutyl phthalate	15 mg/m ³
85-68-7	BBP	15 mg/m ³
117-81-7	bis(2-ethylhexyl) phthalate	10 mg/m ³
117-84-0	Di-n-octyl Phthalate	41 mg/m ³
131-11-3	dimethyl phthalate	15 mg/m ³
PAC-2:		
9002-88-4	Polyethylene low density	170 mg/m ³
80-05-7	bisphenol A	110 mg/m ³
84-66-2	diethyl phthalate	300 mg/m ³
84-74-2	dibutyl phthalate	1,600 mg/m ³
85-68-7	BBP	77 mg/m ³
117-81-7	bis(2-ethylhexyl) phthalate	1,000 mg/m ³
117-84-0	Di-n-octyl Phthalate	450 mg/m ³
131-11-3	dimethyl phthalate	1,600 mg/m ³
PAC-3:		
9002-88-4	Polyethylene low density	1,000 mg/m ³
80-05-7	bisphenol A	650 mg/m ³
84-66-2	diethyl phthalate	1,800 mg/m ³
84-74-2	dibutyl phthalate	9300* mg/m ³
85-68-7	BBP	460 mg/m ³
117-81-7	bis(2-ethylhexyl) phthalate	6,100 mg/m ³
117-84-0	Di-n-octyl Phthalate	11000* mg/m ³
131-11-3	dimethyl phthalate	9300* mg/m ³

7 Handling and storage

Handling:

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Information about protection against explosions and fires: Keep respiratory protective device available.

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: Keep receptacle tightly sealed.

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/m ³
REL	Long-term value: 5 mg/m ³
TLV	Long-term value: 5 mg/m ³
117-81-7 bis(2-ethylhexyl) phthalate	
PEL	Long-term value: 5 mg/m ³
REL	Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³ See Pocket Guide App. A

(Contd. on page 4)

Product Name: Phthalates in Polyethylene Standard w/BPA

(Contd. of page 3)

TLV	Long-term value: NIC-0.1 mg/m ³ NIC: Skin, A3
131-11-3 dimethyl phthalate	
PEL	Long-term value: 5 mg/m ³
REL	Long-term value: 5 mg/m ³
TLV	Long-term value: 5 mg/m ³

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

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

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:** Not required.

9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Solid
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 determined.
· 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 applicable.
· Density	Not applicable.
· Relative density	Not applicable.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	
	Soluble.

(Contd. on page 5)

Product Name: Phthalates in Polyethylene Standard w/BPA

(Contd. of page 4)

· Partition coefficient (n-octanol/water): Not applicable.	
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
VOC content:	0.00 %
· Other information No further relevant information available.	

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:**

131-11-3 dimethyl phthalate

Oral	LD50	6,800 mg/kg (rat)
Dermal	LD50	>10 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
Product is suspected to cause damage to fertility.
Product is suspected to cause birth defects.

· **Carcinogenic categories**

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

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

· **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.
- **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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

(Contd. on page 6)
— US —

Product Name: Phthalates in Polyethylene Standard w/BPA

(Contd. of page 5)

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.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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, ADN, 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** No further relevant information available.
- **Sara**

· Section 313 (Specific toxic chemical listings):	
80-05-7	bisphenol A
84-74-2	dibutyl phthalate
117-81-7	bis(2-ethylhexyl) phthalate
131-11-3	dimethyl phthalate
· TSCA (Toxic Substances Control Act):	
All components have the value ACTIVE.	
· Hazardous Air Pollutants	
84-74-2	dibutyl phthalate
117-81-7	bis(2-ethylhexyl) phthalate
131-11-3	dimethyl phthalate
· Proposition 65	
· Chemicals known to cause cancer:	
28553-12-0	diisononyl 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
80-05-7	bisphenol A
84-74-2	dibutyl phthalate
85-68-7	BBP
117-81-7	bis(2-ethylhexyl) phthalate

(Contd. on page 7)

Printing date 12/05/2022

Reviewed on 12/05/2022

Product Name: Phthalates in Polyethylene Standard w/BPA

(Contd. of page 6)

· **Carcinogenic categories**

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

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



· **Signal word** Danger

· **Hazard-determining components of labeling:**

bis(2-ethylhexyl) phthalate
bisphenol A
dibutyl phthalate
BBP

· **Hazard statements**

H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H360 May damage fertility or the unborn child.

· **Precautionary statements**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 If on skin: Wash with plenty of water.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P321 Specific treatment (see on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 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** 12/05/2022

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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
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)
VOC: Volatile Organic Compounds (USA, EU)
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

(Contd. on page 8)

Printing date 12/05/2022

Reviewed on 12/05/2022

Product Name: Phthalates in Polyethylene Standard w/BPA

(Contd. of page 7)

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Sensitization - Skin 1: Skin sensitisation – Category 1

Carcinogenicity 2: Carcinogenicity – Category 2

Toxic to Reproduction 1B: Reproductive toxicity – Category 1B

— US —