

Safety Data Sheet acc. to OSHA HCS

Printing date 12/29/2017

Reviewed on 12/29/2017

1 Identification

- **Product identifier**
- **Product Name:** Phthalates in Poly(vinyl chloride)
- **Part Number:** CRM-PVC001
- **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.

- **Label elements**

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

- **Hazard pictograms**



GHS08

- **Signal word** Danger

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

BBP

dibutyl phthalate

bis(2-ethylhexyl) phthalate

- **Hazard statements**

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

- **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

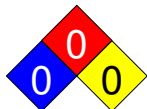
IF exposed or concerned: Get medical advice/attention.

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

- **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.

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· **vPvB:** Not applicable.

3 Composition/information on ingredients

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

- **Dangerous components:**

9002-86-2	polyvinyl chloride	92.2%
117-84-0	Di-n-octyl Phthalate	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**

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:** 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 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:** Pick up mechanically.
- **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.
- **Protective Action Criteria for Chemicals**

- **PAC-I:**

9002-86-2	polyvinyl chloride	3 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
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

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· PAC-2:		
9002-86-2	polyvinyl chloride	33 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
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:		
9002-86-2	polyvinyl chloride	200 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
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.

9002-86-2 polyvinyl chloride	
TLV	Long-term value: 1* mg/m ³ *as respirable fraction
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
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:** Wash hands before breaks and at the end of work.
- **Respiratory protection:** 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

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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.

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 applicable.

Density Not applicable.

Relative density Not applicable.

Vapor density Not applicable.

Evaporation rate Not applicable.

Solubility in / Miscibility with

Water: Insoluble.

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.

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11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

· LD/LC50 values that are relevant for classification:

85-68-7 BBP

Oral	LD50	2,330 mg/kg (rat)
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84-74-2 dibutyl phthalate

Oral	LD50	8,000 mg/kg (rat)
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Dermal	LD50	20,000 mg/kg (rabbit)
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117-81-7 bis(2-ethylhexyl) phthalate

Oral	LD50	30,600 mg/kg (rat)
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Dermal	LD50	25,000 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)

9002-86-2	polyvinyl chloride	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.

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

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· 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 313 (Specific toxic chemical listings):**

131-11-3	dimethyl phthalate
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:**

84-74-2	dibutyl phthalate
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· **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

· **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)**

9002-86-2	polyvinyl chloride	A4
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).

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· Hazard pictograms

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

BBP

dibutyl phthalate

bis(2-ethylhexyl) phthalate

· Hazard statements

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

IF exposed or concerned: Get medical advice/attention.

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 12/29/2017 / -**· 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)

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

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Carc. 2: Carcinogenicity – Category 2

Repr. 1: Reproductive toxicity – Category 1