# 1 Identification

- · Product identifier
- · Product Name: <u>Phthalates in PVC</u>
- · Part Number: CRM-PVC003
- · 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.



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

· Signal word Danger

· Hazard-determining components of labeling:

diisobutyl phthalate di-n-pentyl phthalate di-n-hexyl phthalate dicyclohexyl 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 = 0Fire = 0Reactivity = 0

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#### Product Name: Phthalates in PVC

· 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

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous	components:	
	polyvinyl chloride	99.2%
	diisobutyl phthalate	0.1%
	di-n-pentyl phthalate	0.1%
	di-n-hexyl phthalate	0.1%
	dicyclohexyl phthalate	0.1%
117-81-7	bis(2-ethylhexyl) phthalate	0.1%
85-68-7	BBP	0.1%
84-74-2	dibutyl phthalate	0.1%
· Chemical	dentification of the substance/preparation	
28553-12-0	di-"isononyl" phthalate	0.1%

# 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 to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections

DACI

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-1:		
9002-86-2	2 polyvinyl chloride	3 mg/m <sup>3</sup>
117-81-2	7 bis(2-ethylhexyl) phthalate	10 mg/m <sup>3</sup>
85-68-2	7 BBP	15 mg/m <sup>3</sup>
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	dibutyl phthalate	15 mg/m <sup>3</sup>
· PAC-2:		
	polyvinyl chloride	33 mg/m <sup>3</sup>
117-81-7	bis(2-ethylhexyl) phthalate	1,000 mg/m <sup>3</sup>
85-68-7	BBP	77 mg/m <sup>3</sup>
84-74-2	dibutyl phthalate	1,600 mg/m <sup>3</sup>
· PAC-3:		
9002-86-2	polyvinyl chloride	200 mg/m <sup>3</sup>
117-81-7	bis(2-ethylhexyl) phthalate	6,100 mg/m <sup>3</sup>
85-68-7	BBP	460 mg/m <sup>3</sup>
84-74-2	dibutyl phthalate	9300* mg/m <sup>±</sup>

## 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/m³	
	*as respirable fraction	

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

   TLV
   Long-term value: 5 mg/m³

   84-74-2
   dibutyl phthalate
- PEL Long-term value: 5 mg/m<sup>3</sup> REL Long-term value: 5 mg/m<sup>3</sup>
- TLV Long-term value: 5 mg/m<sup>3</sup>
- 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
- · 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.

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# Product Name: Phthalates in PVC

· Eye protection: Not required.

9 Physical and chemical propertie	28	
Information on basic physical and a     General Information     Appearance:	chemical properties	
· 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.	
<ul> <li>Solubility in / Miscibility with Water:</li> </ul>	Insoluble.	
· Partition coefficient (n-octanol/water): Not applicable.		
· Viscosity:	Net well all	
Dynamic: Kinematic:	Not applicable.	
	Not applicable.	
· Solvent content:	0.00 g/	
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:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.

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· Additional toxicological information:	
· Carcinogenic categories	
· IARC (International Agency for Research on Cancer)	
9002-86-2 polyvinyl chloride	3
117-81-7 bis(2-ethylhexyl) phthalate	28
85-68-7 BBP	3
· NTP (National Toxicology Program)	
117-81-7 bis(2-ethylhexyl) phthalate	R
· 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 2 (Self-assessment): hazardous for water

- Do not allow product to reach ground water, water course or sewage system.
- Danger to drinking water if even small quantities leak into the ground.
- · 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.

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 MARP Code	<b>OL73/78 and the IBC</b> Not applicable.	
UN ''Model Regulation'':	Not Regulated	

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Safety, health and environmental regulations/legislation specific for the substance or mixture Sara	
Section 313 (Specific toxic chemical listings):	
117-81-7 bis(2-ethylhexyl) phthalate	
84-74-2 dibutyl phthalate	
TSCA (Toxic Substances Control Act):	
All ingredients are listed.	
TSCA new (21st Century Act) (Substances not listed)	
131-18-0 di-n-pentyl phthalate	
Proposition 65	
Chemicals known to cause cancer:	
117-81-7 bis(2-ethylhexyl) phthalate	
28553-12-0 di-"isononyl" phthalate	
Chemicals known to cause reproductive toxicity for females:	
84-75-3 di-n-hexyl phthalate	
84-74-2 dibutyl phthalate	
Chemicals known to cause reproductive toxicity for males:	
84-75-3 di-n-hexyl phthalate	
117-81-7 bis(2-ethylhexyl) phthalate	
84-74-2 dibutyl phthalate	
Chemicals known to cause developmental toxicity:	
117-81-7 bis(2-ethylhexyl) phthalate	
85-68-7 BBP	
84-74-2 dibutyl phthalate	
Carcinogenic categories	
EPA (Environmental Protection Agency)	
117-81-7 bis(2-ethylhexyl) phthalate	
85-68-7 BBP	
84-74-2 dibutyl phthalate	
TLV (Threshold Limit Value established by ACGIH)	
9002-86-2 polyvinyl chloride	
117-81-7 bis(2-ethylhexyl) phthalate	
NIOSH-Ca (National Institute for Occupational Safety and Health)	
117-81-7 bis(2-ethylhexyl) phthalate	

Hazara pictograms



· Signal word Danger

Hazard-determining components of labeling: diisobutyl phthalate di-n-pentyl phthalate di-n-hexyl phthalate dicyclohexyl 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.

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US

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#### Product Name: Phthalates in PVC

Dispose of contents/container in accordance with local/regional/national/international regulations. · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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#### **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) 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 Carc. 2: Carcinogenicity – Category 2 Repr. 1: Reproductive toxicity – Category 1