Safety Data Sheet
acc. to OSHA HCS

Date of PDF Creation 06/08/2023 Reviewed on 06/08/2023

1 Identification

· **Product identifier**

· **Trade name: Revive Water Based Coating**
· **Application of the substance / the mixture** Coating compound/ Surface coating/ paint

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
perkEpave LLC
418 Wilson Street
Pottstown, PA 19464
215-316-6383
www.perkepave.cpm

· **Information department:** Product Development Department
· **Emergency telephone number:**
For Chemical Emergency
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night

Within USA and Canada: (800) 424-9300 Reference CCN 649199
Outside USA and Canada: +1 (703) 527-3887 Reference CCN 649199

2 Hazard(s) identification

· **Classification of the substance or mixture**
The product is not classified, according to the Globally Harmonized System (GHS).
· **Storage:** Do not allow product to freeze.

· **Label elements**
· **GHS label elements** Void
· **Hazard pictograms** Void
· **Signal word** Void
· **Hazard statements** Void
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 0
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 1
Fire = 0
Reactivity = 0

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

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Date of PDF Creation 06/08/2023 Reviewed on 06/08/2023

Trade name: Revive Water Based Coating

(Contd. of page 1)

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Waterborne Polyurethane Dispersion

· **Dangerous components:** Void

4 First-aid measures

· **Description of first aid measures**
· **After inhalation:**
If inhaled, remove victim from the immediate area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.
· **After skin contact:**
Instantly wash with water and soap and rinse thoroughly. Remove any contaminated clothing. If skin irritation persists, seek medical advice.
· **After eye contact:**
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Use lukewarm water if possible. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Then remove contact lenses, if easily removable, and continue eye irrigation for not less than 15 minutes. Get medical attention.
· **After swallowing:** Wash mouth out with water. Do not give anything by mouth to an unconscious person.
· **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:**
Water
Water fog, carbon dioxide, foam or dry chemical.
· **Special hazards arising from the substance or mixture**
The dried polymer is capable of combusting.
Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.
· **Advice for firefighters**
· **Protective equipment:**
Wear breathing apparatus
Wear full protective suit with self-contained breathing apparatus
See section 8
· **Additional information** Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

· **Environmental precautions:** Do not allow product to reach sewage system or bodies of water.
· **Methods and material for containment and cleaning up:** Ensure adequate ventilation
· **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-1:**		
25498-49-1	Propanol, [2-(2-methoxymethylethoxy)methylethoxy]-	9.6 mg/m³
872-50-4	N-methyl-2-pyrrolidone	30 ppm
100-42-5	styrene	20 ppm
50-00-0	formaldehyde	0.90 ppm
140-88-5	ethyl acrylate	8.3 ppm
75-21-8	ethylene oxide	5 ppm
123-91-1	1,4-dioxane	17 ppm

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 2)

· **PAC-2:**		
25498-49-1	Propanol, [2-(2-methoxymethylethoxy)methylethoxy]-	110 mg/m³
872-50-4	N-methyl-2-pyrrolidone	32 ppm
100-42-5	styrene	130 ppm
50-00-0	formaldehyde	14 ppm
140-88-5	ethyl acrylate	36 ppm
75-21-8	ethylene oxide	45 ppm
123-91-1	1,4-dioxane	320 ppm

· **PAC-3:**		
25498-49-1	Propanol, [2-(2-methoxymethylethoxy)methylethoxy]-	630 mg/m³
872-50-4	N-methyl-2-pyrrolidone	190 ppm
100-42-5	styrene	1100* ppm
50-00-0	formaldehyde	56 ppm
140-88-5	ethyl acrylate	240 ppm
75-21-8	ethylene oxide	200 ppm
123-91-1	1,4-dioxane	760 ppm

7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Ensure good ventilation/exhaust at the workplace.
Avoid contact with skin, eyes and clothing. Avoid breathing vapor or mist. Wash after handling.
· **Information about protection against explosions and fires:** Pay attention to the general rules of internal fire prevention.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Recommended ideal storage temperature range: 59 - 77 degrees F. Product should not be stored below 40 degrees or above 110 degrees F.
No special measures required
Material can increase in viscosity if stored at lower temperatures for an extended period of time.
· **Information about storage in one common storage facility:** Store away from foodstuffs.
· **Further information about storage conditions:**
Protect from frost.
Keep container 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 section 7.

· **Control parameters**
· **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **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.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
Gases fumes and aerosols should not be inhaled.
· **Breathing equipment:**
Use NIOSH approved equipment only. For exposure above the exposure limit, use of a respirator that has been selected by an industrial hygienist or other technically qualified person for the specific work conditions. If respirators are used, OSHA requires compliance with its respirator program.

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 3)

In case of inadequate ventillation or high vapor concentration, wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator as needed. Observe OSHA regulations for respirator use (29 CFR 1910.134).

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
The following glove types are recommended: neoprene, nitrile rubber, PVC or butyl rubber. Thin, disposable latex gloves should be avoided for repeated or long term handling of the material. Recommended thickness of the glove material: 5 - 6 mil
Selection of the glove material should be based on the consideration of 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Tightly sealed goggles

· **Body protection:** *Protective work clothing*

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	*Liquid*
Color:	*Unpigmented*
· **Odor:**	*Characteristic*
· **Odor threshold:**	*Not determined.*
· **pH-value at 20 °C (68 °F):**	*9*
· **Change in condition**	
Melting point/Melting range:	*Undetermined.*
Boiling point/Boiling range:	*>100 °C (>212 °F)*
· **Flash point:**	*>100 °C (>212 °F)*
· **Flammability (solid, gaseous):**	*Not applicable.*
· **Decomposition temperature:**	*Not determined.*
· **Ignition temperature:**	*Product is not selfigniting.*
· **Danger of explosion:**	*Product does not present an explosion hazard.*
· **Explosion limits:**	
Lower:	*Not determined.*
Upper:	*Not determined.*
· **Vapor pressure:**	*Not determined.*
· **Density at 20 °C (68 °F):**	*1.03 g/cm³ (8.59535 lbs/gal)*
· **Relative density**	*Not determined.*
· **Vapor density**	*Not determined.*
· **Evaporation rate**	*Not determined.*
· **Solubility in / Miscibility with**	
Water:	*Dispersible.*

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 4)

· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic at 20 °C (68 °F):	5,500 mPas
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	0.0 %
VOC content:	0.02 % 0.2 g/l / 0.00 lb/gal
Solids content:	25.0 %
· **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.
· **Conditions to avoid**
Excessively high heat or freezing temperatures
Direct sunlight, extremely low or high temperatures, ignition sources and incompatible materials
· **Incompatible materials:**
Acids and cationic material will cause the product to seperate. Strong oxidizing agents. Avoid nitrosating agents.
· **Hazardous decomposition products:**
Combustion of the dried polymer may release: Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen and traces of HCN.

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**
· **Primary irritant effect:**
· **on the skin:** Skin irritation may occur with overexposure.
· **on the eye:** Eye irritation may occur with overexposure.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product is not subject to classification according to internally approved calculation methods for preparations:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
100-42-5	styrene	2A
50-00-0	formaldehyde	1
140-88-5	ethyl acrylate	2B
75-21-8	ethylene oxide	1
123-91-1	1,4-dioxane	2B

· **NTP (National Toxicology Program)**		
100-42-5	styrene	R
50-00-0	formaldehyde	K
75-21-8	ethylene oxide	K
123-91-1	1,4-dioxane	R

· **OSHA-Ca (Occupational Safety & Health Administration)**	
50-00-0	formaldehyde
75-21-8	ethylene oxide

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 5)

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.
Avoid transfer into the environment.
· **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:** Smaller quantities can be disposed of with household waste.

· **Uncleaned packagings:**
· **Recommendation:**
Disposal must be made according to official regulations.
Empty containers may only be disposed of after neutralising any product remaining on the walls of the containers with a mixture of isopropanol, ammonia and water and removal of the warning labels. For preparation of decontamination solution, refer to section 6.

14 Transport information

· **UN-Number**	Void
· **UN proper shipping name**	Void
· **Transport hazard class(es)**	Void
· **Packing group**	Void
· **Environmental hazards:**	
· **Marine pollutant:**	No
· **Special precautions for user**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
· **Sara**

· **Section 355 (extremely hazardous substances):**	
50-00-0	formaldehyde
75-21-8	ethylene oxide

· **Section 313 (Specific toxic chemical listings):**	
872-50-4	N-methyl-2-pyrrolidone
100-42-5	styrene
50-00-0	formaldehyde
140-88-5	ethyl acrylate
75-21-8	ethylene oxide
123-91-1	1,4-dioxane

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Date of PDF Creation 06/08/2023 Reviewed on 06/08/2023

Trade name: Revive Water Based Coating

(Contd. of page 6)

· **TSCA (Toxic Substances Control Act):**
All components have the value ACTIVE.

· **Hazardous Air Pollutants**

100-42-5	styrene
50-00-0	formaldehyde
140-88-5	ethyl acrylate
75-21-8	ethylene oxide
123-91-1	1,4-dioxane

· **Proposition 65**

· **Chemicals known to cause cancer:**

100-42-5	styrene
50-00-0	formaldehyde
140-88-5	ethyl acrylate
75-21-8	ethylene oxide
123-91-1	1,4-dioxane

· **Chemicals known to cause reproductive toxicity for females:**

75-21-8	ethylene oxide

· **Chemicals known to cause reproductive toxicity for males:**

75-21-8	ethylene oxide

· **Chemicals known to cause developmental toxicity:**

872-50-4	N-methyl-2-pyrrolidone
75-21-8	ethylene oxide

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**

50-00-0	formaldehyde	B1
75-21-8	ethylene oxide	CaH
123-91-1	1,4-dioxane	L

· **TLV (Threshold Limit Value)**

100-42-5	styrene	A4
50-00-0	formaldehyde	A2
140-88-5	ethyl acrylate	A4
75-21-8	ethylene oxide	A2
123-91-1	1,4-dioxane	A3

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

50-00-0	formaldehyde
140-88-5	ethyl acrylate
75-21-8	ethylene oxide
123-91-1	1,4-dioxane

· **GHS label elements** Void
· **Hazard pictograms** Void
· **Signal word** Void
· **Hazard statements** Void
· **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 Development Department
· **Contact:** Product Development Department
· **Date of preparation / last revision** 06/08/2023
· **Abbreviations and acronyms:**
EINECS: European Inventory of Existing Commercial Chemical Substances

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Date of PDF Creation 06/08/2023 *Reviewed on 06/08/2023*

Trade name: Revive Water Based Coating

(Contd. of page 7)

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