

# SAFETY DATA SHEET

GHS  
United States

## Section 1. Product and company identification

|                              |  |  |
|------------------------------|--|--|
| <b>Product name</b>          | <b>VANFRE® AP-2</b>  | <b><u>In case of emergency</u></b>                         |
| <b>Code</b>                  | 49865  | 1-203-853-1400   |
| <b>Supplier/Manufacturer</b> | Vanderbilt Chemicals, LLC<br>30 Winfield Street<br>Norwalk, CT 06855 | Chemtrec: 1-800-424-9300<br>Outside US:<br>+1-703-527-3887 |
| <b>Synonym</b>               | Not available.   |  |
| <b>Material uses</b>         | Processing aid   |  |
| <b>Product type</b>          | Solid.   |  |

## Section 2. Hazards identification

|   |   |
|---|---|
| <b>OSHA/HCS status</b>                            | This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).   |
| <b>Classification of the substance or mixture</b> | SKIN CORROSION/IRRITATION - Category 2<br>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B<br>CARCINOGENICITY - Category 2<br>TOXIC TO REPRODUCTION (Fertility) - Category 1B<br>TOXIC TO REPRODUCTION (Unborn child) - Category 1B<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3<br>Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 55% |

### GHS label elements

#### Hazard pictograms



#### Signal word

Danger

#### Hazard statements

Causes skin and eye irritation.  
May damage fertility or the unborn child.  
Suspected of causing cancer.  
May cause respiratory irritation.

### Precautionary statements

#### Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves: > 8 hours (breakthrough time): neoprene. Wear eye or face protection: Recommended: safety glasses with side-shields. Use only outdoors or in a well-ventilated area. Avoid breathing dust. Wash hands thoroughly after handling.

## Section 2. Hazards identification

|   |   |
|---|---|
| <b>Response</b>                         | IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. |
| <b>Storage</b>                          | Store locked up.  |
| <b>Disposal</b>                         | Dispose of contents and container in accordance with all local, regional, national and international regulations.   |
| <b>Hazards not otherwise classified</b> | None known.   |

## Section 3. Composition/information on ingredients

**Substance/mixture** Mixture

| Ingredient name           | CAS number | % by weight |
|---------------------------|------------|-------------|
| wax                       | -          | 30 - 50     |
| di(2-ethylhexyl)phthalate | 117-81-7   | 10 - 30     |
| oleic acid                | 112-80-1   | 10 - 30     |
| zinc compounds            | -          | 10 - 20     |

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

|                     |   |
|---------------------|---|
| <b>Eye contact</b>  | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.   |
| <b>Inhalation</b>   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.                                   |
| <b>Skin contact</b> | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.   |
| <b>Ingestion</b>    | Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |

## Section 4. First aid measures

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

|                     |  |
|---------------------|--|
| <b>Eye contact</b>  | Causes serious eye irritation.           |
| <b>Inhalation</b>   | May cause respiratory irritation.        |
| <b>Skin contact</b> | Causes skin irritation.                  |
| <b>Ingestion</b>    | Irritating to mouth, throat and stomach. |

#### Over-exposure signs/symptoms

|                     |   |
|---------------------|---|
| <b>Eye contact</b>  | Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness  |
| <b>Inhalation</b>   | Adverse symptoms may include the following:<br>respiratory tract irritation<br>coughing<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations |
| <b>Skin contact</b> | Adverse symptoms may include the following:<br>irritation<br>redness<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations                    |
| <b>Ingestion</b>    | Adverse symptoms may include the following:<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations   |

### Indication of immediate medical attention and special treatment needed, if necessary

|                                   |   |
|-----------------------------------|---|
| <b>Notes to physician</b>         | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.   |
| <b>Specific treatments</b>        | No specific treatment.  |
| <b>Protection of first-aiders</b> | No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

|                                       |   |
|---------------------------------------|---|
| <b>Suitable extinguishing media</b>   | Use an extinguishing agent suitable for the surrounding fire. |
| <b>Unsuitable extinguishing media</b> | None known.   |

|   |                                       |
|---|---------------------------------------|
| <b>Specific hazards arising from the chemical</b> | No specific fire or explosion hazard. |
|---|---------------------------------------|

## Section 5. Fire-fighting measures

### Hazardous thermal decomposition products

Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides

### Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

### Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

#### For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

#### Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

#### Small spill

Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

#### Large spill

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

#### Protective measures

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

## Section 7. Handling and storage

### Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name           | Exposure limits   |
|---------------------------|---|
| wax                       | <p><b>ACGIH TLV (United States, 6/2013).</b><br/>TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Fume</p> <p><b>NIOSH REL (United States, 10/2013).</b><br/>TWA: 2 mg/m<sup>3</sup> 10 hours. Form: Fume</p> <p><b>ACGIH (United States, 1994).</b><br/>TWA: 2 mg/m<sup>3</sup></p> <p><b>NIOSH (United States, 1994).</b><br/>TWA: 2 mg/m<sup>3</sup></p> <p><b>OSHA (United States, 1989).</b><br/>TWA: 2 mg/m<sup>3</sup></p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b><br/>TWA: 2 mg/m<sup>3</sup> 8 hours.</p>   |
| di(2-ethylhexyl)phthalate | <p><b>ACGIH (United States, 1996).</b><br/>TWA: 5 mg/m<sup>3</sup><br/>STEL: 10 mg/m<sup>3</sup></p> <p><b>RQMT (United States, 1994).</b><br/>TWA: 5 mg/m<sup>3</sup><br/>STEL: 10 mg/m<sup>3</sup></p> <p><b>OSHA (United States, 1989).</b><br/>TWA: 5 mg/m<sup>3</sup><br/>STEL: 10 mg/m<sup>3</sup></p> <p><b>ACGIH TLV (United States, 6/2013).</b><br/>TWA: 5 mg/m<sup>3</sup> 8 hours.</p> <p><b>NIOSH REL (United States, 10/2013).</b><br/>STEL: 10 mg/m<sup>3</sup> 15 minutes.<br/>TWA: 5 mg/m<sup>3</sup> 10 hours.</p> <p><b>OSHA PEL (United States, 2/2013).</b><br/>TWA: 5 mg/m<sup>3</sup> 8 hours.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b><br/>STEL: 10 mg/m<sup>3</sup> 15 minutes.<br/>TWA: 5 mg/m<sup>3</sup> 8 hours.</p> |
| zinc compounds            | <p><b>NIOSH REL (United States, 10/2013).</b><br/>TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Respirable fraction<br/>TWA: 10 mg/m<sup>3</sup> 10 hours. Form: Total</p> <p><b>OSHA PEL (United States, 2/2013).</b><br/>TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction<br/>TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust</p>  |

## Section 8. Exposure controls/personal protection

### OSHA PEL 1989 (United States, 3/1989).

TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction

TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust

### ACGIH TLV (United States, 6/2013).

TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total particulate mass

### NIOSH (United States, 1994). Notes: Respirable

TWA: 10 mg/m<sup>3</sup>

### OSHA (United States, 1989). Notes: Respirable

TWA: 5 mg/m<sup>3</sup>

### Appropriate engineering controls

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: safety glasses with side-shields

#### Skin protection

##### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): neoprene

##### Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: lab coat

##### Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### Respiratory protection

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

### Personal protective equipment (Pictograms)



## Section 9. Physical and chemical properties

### Appearance

|  |   |
|--|---|
| Physical state                               | Solid. [Flakes.]                                  |
| Color  | Off-white.  |
| Odor   | Lard-like.  |
| Odor threshold                               | Not available.                                    |
| pH   | Not available.                                    |
| Melting point                                | Not available.                                    |
| Boiling point                                | Not available.                                    |
| Flash point                                  | Open cup: 202°C (395.6°F) [Cleveland.]            |
| Burning time                                 | Not available.                                    |
| Burning rate                                 | Not available.                                    |
| Evaporation rate                             | Not available.                                    |
| Flammability (solid, gas)                    | Not available.                                    |
| Lower and upper explosive (flammable) limits | Not available.                                    |
| Vapor pressure                               | Not available.                                    |
| Vapor density                                | Not available.                                    |
| Density                                      | 0.98 g/cm <sup>3</sup>                            |
| Relative density                             | 0.98  |
| Solubility                                   | Insoluble in the following materials: cold water. |
| Solubility in water                          | Not available.                                    |
| Partition coefficient: n-octanol/water       | Not available.                                    |
| Auto-ignition temperature                    | Not available.                                    |
| Decomposition temperature                    | Not available.                                    |
| SADT   | Not available.                                    |
| Viscosity                                    | Not available.                                    |

## Section 10. Stability and reactivity

|                                    |  |
|------------------------------------|--|
| Reactivity                         | No specific test data related to reactivity available for this product or its ingredients.           |
| Chemical stability                 | The product is stable.   |
| Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur.                      |
| Conditions to avoid                | No specific data.  |
| Incompatible materials             | No specific data.  |
| Hazardous decomposition products   | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |



## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name   | Result                          | Species | Dose        | Exposure |
|---------------------------|---------------------------------|---------|-------------|----------|
| oleic acid                | LD50 Oral                       | Rat     | 25000 mg/kg | -        |
|                           | LD50 Oral                       | Rat     | >5000 mg/kg | -        |
| di(2-ethylhexyl)phthalate | LD50 Dermal                     | Rabbit  | 25000 mg/kg | -        |
|                           | LD50 Oral                       | Rat     | 31000 mg/kg | -        |
| zinc compounds            | LC50 Inhalation Dusts and mists | Rat     | >200 mg/l   | 1 hours  |
|                           | LD50 Dermal                     | Rabbit  | >2000 mg/kg | -        |
|                           | LD50 Oral                       | Rat     | >5000 mg/kg | -        |

#### Conclusion/Summary

Di(2-ethylhexyl)phthalate:

- NTP bioassay shows increased incidence of hepatocellular carcinomas in rats and mice. Embryotoxic and teratogenic effects have been noted in rats and mice.

- A two year feeding study of rats yielded a NOAEL between 0.05 and 0.25% of the substance in the diet. No adverse effects were observed in rats fed these dietary concentrations for a full, normal life span (2 years).

- Rats fed the substance for 18 months had a significantly lower incidence of liver tumors than rats fed it for 2 years. Most physiological effects on organs are reversible, if returned to a normal diet.

#### Irritation/Corrosion

| Product/ingredient name   | Result               | Species | Score | Exposure                | Observation |
|---------------------------|----------------------|---------|-------|-------------------------|-------------|
| di(2-ethylhexyl)phthalate | Eyes - Mild irritant | Rabbit  | -     | 24 hours 500 milligrams | -           |
|                           | Skin - Mild irritant | Rabbit  | -     | 24 hours 500 milligrams | -           |

#### Conclusion/Summary

##### Skin

May cause skin irritation. (Based on testing of similar products and/or the components.)

##### Eyes

May cause eye irritation. (Based on testing of similar products and/or the components.)

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

| Product/ingredient name   | OSHA | IARC | NTP  |
|---------------------------|------|------|--|
| di(2-ethylhexyl)phthalate | -    | 2B   | Reasonably anticipated to be a human carcinogen. |

#### Reproductive toxicity

Not available.



## Section 11. Toxicological information

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

| Name           | Category   | Route of exposure | Target organs                |
|----------------|------------|-------------------|------------------------------|
| zinc compounds | Category 3 | Not applicable.   | Respiratory tract irritation |

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Information on the likely routes of exposure

Routes of entry anticipated: Oral, Inhalation.

### Potential acute health effects

|                     |   |
|---------------------|---|
| <b>Eye contact</b>  | Causes eye irritation.                            |
| <b>Inhalation</b>   | May cause respiratory irritation.                 |
| <b>Skin contact</b> | Causes skin irritation.                           |
| <b>Ingestion</b>    | No known significant effects or critical hazards. |

### Symptoms related to the physical, chemical and toxicological characteristics

|                     |   |
|---------------------|---|
| <b>Eye contact</b>  | Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness  |
| <b>Inhalation</b>   | Adverse symptoms may include the following:<br>respiratory tract irritation<br>coughing<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations |
| <b>Skin contact</b> | Adverse symptoms may include the following:<br>irritation<br>redness<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations                    |
| <b>Ingestion</b>    | Adverse symptoms may include the following:<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations   |

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

|                                    |                |
|------------------------------------|----------------|
| <b>Potential immediate effects</b> | Not available. |
|------------------------------------|----------------|

## Section 11. Toxicological information

**Potential delayed effects** Not available.

### Long term exposure

**Potential immediate effects** Not available.

**Potential delayed effects** Not available.

### Potential chronic health effects

Not available.

**General** No known significant effects or critical hazards.

**Carcinogenicity** Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** No known significant effects or critical hazards.

**Teratogenicity** May damage the unborn child.

**Developmental effects** No known significant effects or critical hazards.

**Fertility effects** May damage fertility.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route  | ATE value   |
|--------|-------------|
| Dermal | 10000 mg/kg |

### Other information

Not available.

## Section 12. Ecological information

### Toxicity

| Product/ingredient name   | Result   | Species                 | Exposure                       |
|---------------------------|--|-------------------------|--------------------------------|
| di(2-ethylhexyl)phthalate | Acute LC50 1106.2 mg/l<br>Chronic NOEC 77 µg/l<br>Chronic NOEC 12 µg/l | Fish<br>Daphnia<br>Fish | 96 hours<br>21 days<br>28 days |

### Persistence and degradability

Not available.

### Bioaccumulative potential

| Product/ingredient name   | LogP <sub>ow</sub> | BCF  | Potential |
|---------------------------|--------------------|------|-----------|
| di(2-ethylhexyl)phthalate | 7.6                | 1380 | high      |
| zinc compounds            | 1.2                | -    | low       |
| oleic acid                | 7.73               | -    | high      |

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** Not available.

**Other adverse effects** No known significant effects or critical hazards.

## Section 12. Ecological information

## Section 13. Disposal considerations

### Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### RCRA classification

Not classified. [Processing aid component is listed in 261.33 (f), U-waste.]

### United States - RCRA Toxic hazardous waste "U" List

| Ingredient                | CAS #    | Status | Reference number |
|---------------------------|----------|--------|------------------|
| di(2-ethylhexyl)phthalate | 117-81-7 | Listed | U028             |

Disposal should be in accordance with applicable regional, national and local laws and regulations.

## Section 14. Transport information

| Regulatory information    | UN number      | Proper shipping name | Classes | PG* | Label | Additional information   |
|---------------------------|----------------|----------------------|---------|-----|-------|--|
| <b>DOT Classification</b> | Not regulated. | -                    | -       | -   |       | <b>Reportable quantity</b><br>500 lbs / 227 kg<br>Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. |
| <b>TDG Classification</b> | Not regulated. | -                    | -       | -   |       | -  |
| <b>ADR/RID Class</b>      | Not regulated. | -                    | -       | -   |       | -  |
| <b>IMDG Class</b>         | Not regulated. | -                    | -       | -   |       | -  |
| <b>IATA-DGR Class</b>     | Not regulated. | -                    | -       | -   |       | -  |

PG\* : Packing group

## Section 15. Regulatory information

[United States inventory \(TSCA 8b\)](#) All components are listed or exempted.

### [U.S. Federal regulations](#)

**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined

**Clean Water Act (CWA) 307:** Di-(2-ethylhexyl) phthalate; zinc compounds

**Clean Air Act Section 112** Listed

**(b) Hazardous Air Pollutants (HAPs)**

### [SARA 302/304](#)

#### [Composition/information on ingredients](#)

No products were found.

### [SARA 304 RQ](#)

Not applicable.

### [SARA 311/312](#)

#### [Classification](#)

SKIN IRRITATION - Category 2  
 EYE IRRITATION - Category 2B  
 CARCINOGENICITY - Category 2  
 TOXIC TO REPRODUCTION (Fertility) - Category 1B  
 TOXIC TO REPRODUCTION (Unborn child) - Category 1B  
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

#### [Composition/information on ingredients](#)

| Name                      | %       | Classification  |
|---------------------------|---------|---|
| di(2-ethylhexyl)phthalate | 10 - 30 | EYE IRRITATION - Category 2A<br>CARCINOGENICITY - Category 2<br>TOXIC TO REPRODUCTION (Fertility) - Category 1B   |
| zinc compounds            | 10 - 20 | TOXIC TO REPRODUCTION (Unborn child) - Category 1B<br>COMBUSTIBLE DUSTS<br>EYE IRRITATION - Category 2A<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 |

### [SARA 313](#)

|  | Product name              | CAS number | %       |
|--|---------------------------|------------|---------|
| <b>Form R - Reporting requirements</b> | di(2-ethylhexyl)phthalate | 117-81-7   | 10 - 30 |
|  | zinc compounds            | -          | 10 - 20 |
| <b>Supplier notification</b>           | di(2-ethylhexyl)phthalate | 117-81-7   | 10 - 30 |
|  | zinc compounds            | -          | 10 - 20 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### [State regulations](#)

#### [Massachusetts](#)

The following components are listed: wax; DI-SEC-OCTYL PHTHALATE; 1, 2-BENZENEDICARBOXYLIC ACID[BIS(2-ETHYLHEXYL)] ESTER; zinc compounds

#### [New York](#)

The following components are listed: Bis(2-ethylhexyl)phthalate; Di(2-ethylhexyl) phthalate

#### [New Jersey](#)

The following components are listed: wax; BIS(2-ETHYLHEXYL)PHTHALATE; 1, 2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER; zinc compounds

#### [Pennsylvania](#)

The following components are listed: wax; 1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER; 9-OCTADECENOIC ACID (Z)-; zinc compounds

#### [California Prop. 65](#)

## Section 15. Regulatory information



**WARNING:** This product can expose you to Di(2-ethylhexyl)phthalate, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

| Ingredient name           | No significant risk level | Maximum acceptable dosage level |
|---------------------------|---------------------------|---------------------------------|
| Di(2-ethylhexyl)phthalate | Yes.                      | Yes.                            |

### International regulations

#### Australia inventory (AICS)

All components are listed or exempted.

#### Canada inventory

All components are listed or exempted.

#### China inventory (IECSC)

All components are listed or exempted.

#### Europe inventory

All components are listed or exempted.

According to Annex I to Directive 67/548/EEC, bis(2-ethylhexyl)phthalate (DEHP) is classified as substance toxic to reproduction Repr. Cat. 2; R60-61 (May impair fertility; May cause harm to the unborn child).  
According to Regulation (EC) No. Type 1272/2008 [CLP], bis(2-ethylhexyl) phthalate (DEHP) is classified as Repr. 1B, H360FD (Fertility and Unborn child).

#### Japan inventory (ENCS)

All components are listed or exempted.

#### Korea inventory (KECI)

All components are listed or exempted.

#### New Zealand Inventory of Chemicals (NZIoC)

All components are listed or exempted.

#### Philippines inventory (PICCS)

All components are listed or exempted.

#### Taiwan Chemical Substances Inventory (TCSI)

## Section 16. Other information

### Hazardous Material Identification System (U.S.A.)

|                  |   |   |
|------------------|---|---|
| Health           | * | 2 |
| Flammability     |   | 1 |
| Physical hazards |   | 0 |
|                  |   |   |

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

### National Fire Protection Association (U.S.A.)



### History

|                        |            |
|------------------------|------------|
| Date of printing       | 11/29/2017 |
| Validation date        | 11/29/2017 |
| Date of previous issue | 1/22/2015  |
| Version                | 2          |

## Section 16. Other information

### Key to abbreviations

ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

### References

Not available.

### Information contact

**Vanderbilt Global Services, LLC**  
**Corporate Risk Management**  
**1-203-295-2143**

Visit [www.vanderbiltchemicals.com](http://www.vanderbiltchemicals.com) for more information.

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