

SAFETY DATA SHEET

1. COMPANY AND PRODUCT INFORMATION

Product Name:

Sundek Additive

Supplier Sundeck Products USA, Inc. 805 Ave. H Suite 508 Arlington, Texas 76011 For health and safety questions: Phone number (888) 390-0305 Fax number (817) 649-7292 E-mail: products@sundek.com For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 Outside USA and Canada: 1-703-527-3887 (collect calls accepted)

2. HAZARDOUS IDENTIFICATION

2.1 Classification of the substance or mixture Classification (GHS):

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (GHS):

No labeling according to GHS required..

Hazard ingredients (labelling): Vinyl acetate/ethane copolymer, water

2.3 Other hazards

No data available.

3. HAZARDS IDENTIFICATION

3.1 Chemical characterization (preparation)

Chemical characteristics: Copolymer of: vinyl acetate + ethylene (dispersion in water).

3.2 Information of ingredients:

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product.

4. FIRST-AID MEASURES

4.1 General information:
4.2 After inhalation:
4.3 After contact with the skin:
4.4 After contact with the eyes:
4.5 After swallowing:
Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.
If inhaled as aerosol, remove to fresh air. No special measures required.
If contact with skin, wash skin with plenty of water or with water and soap.
If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.
For ingestion, if conscious, give several glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids. Get medical attention if symptoms occur. Show label if possible.

FIRE-FIGHTING MEASURES

5.

| 5.1 Flammable properties: | | |
|--------------------------------------|------------|--|
| Property: | Value: | |
| Flash point | Not app | blicable |
| Boiling point/boiling range | Approx | 100 C (212 F) at 1013 hPa |
| Lower explosion limit (LEL) | not app | |
| Ignition temperature | not app | |
| ignition temperature | not upp | |
| 5.2 Fire and explosion hazards: | | Material does not burn. Dried up material is combustible. This material does not present any unusual fire or explosion hazards. |
| 5.3 Recommended extinguishing media: | | Use extinguishing measures appropriate to the source of the fire. Water may be used to cool the tanks and structures adjacent to the fire. |
| 5.4 Unsuitable extinguishing media: | | Not applicable |
| 5.5 Special exposure hazards ar | ising fror | n the substance or preparation itself, combustion products, resulting gases: |
| 5.6 Fire fighting procedures: | 8 | At low oxygen level: acetic acid. Fire fighters should wear full protective clothing including a self-contained breathing apparatus. |

6. ACCIDENTAL RELEASE MEASURES

| 6.1 Precautions: | Wear personal protection equipment (see section 8). If material is released indicate risk of slipping. |
|-------------------------|--|
| | HAZWOPER PPE Level: D |
| 6.2 Containment: | Prevent material from entering sewers or surface waters. Contain any fluid that runs out using suitable |
| | material (e.g. earth). Spills of material which could reach surface waters must be reported to the United |
| | States Coast Guard National Response Center's toll free number (800) 424-8802. |
| 6.3 Methods for cleanin | g up: Take up mechanically and dispose of according to local/state/federal regulations/ For small amounts: |
| | Absorb with a liquid binding material such as diatomaceous earth and dispose of according to |
| | local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean up |
| | with plenty of water. Dispose of cleansing water in accordance with local/state/federal regulations. |
| | |

7. HANDLING AND STORAGE

| 7.0 General Information: Avoid e | Avoid exposure by technical measures or personal protective equipment. | | |
|---|--|--|--|
| 7.1 Handling | | | |
| Precautions for safe handling: | Spilled substance increases risk of slipping. | | |
| Precautions against fire and explosion: | No special precautions against fire and explosion required. | | |
| 7.2 Storage | | | |
| Conditions for storage rooms and vessels | s: Protect against frost. | | |
| Advice for storage of incompatible mater | rials: Not applicable. | | |
| Further information for storage: | Not applicable. | | |
| Minimum temperature allowed during storage and transportation: 0 degrees C (32 degrees F) | | | |

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

| 8.1 Engineering controls | | |
|-----------------------------------|---|--|
| Ventilation: | Use with adequate ventilation. | |
| Local exhaust: | No special ventilation required. | |
| 8.2 Associate substances with spe | ecific control parameters such as limit values | |
| Maximum airborne concentrations | at the workplace: None known. | |
| 8.3 Personal protection equipme | nt (PPE) | |
| Respiratory Protection : | Not necessary. | |
| Hand protection: | Recommendation: Any liquid-tight rubber or vinyl gloves. | |
| Eye protection: | Safety glasses with side shields or chemical safety goggles. | |
| Other protective clothing/equipr | Additional skin protection, such as SARANEX coated Tyvek apron, over-sleeves, lab | |
| | coat, overalls, or protective suit should be worn if splashing could occur. Provide eye | |
| | bath and safety shower. | |

8.4 General hygiene and protection measures:

res: Do not eat or drink when handling. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance

9.

| | Physical state/form: Color: Odor: | liquid white slight | |
|--|---|---------------------------|--|
| Flash point:not applicableIgnition temperature:not applicableLower explosion limit (LEL):not applicableVapor pressure:23 hPa at 20 degrees C (68 degrees F)Density:1.07 g/m3 at 21 degrees C (68 degrees F)Water solubility/miscibility:moderately solublepH-Value:4.7 - 5.7 | Melting point/melting range Boiling point/boiling range: Flash point: Ignition temperature: Lower explosion limit (LEL Vapor pressure: Density: Water solubility/miscibility: pH-Value: | .): | approx. 100 degrees C (212 degrees F) at 1013 hPa not applicable not applicable 23 hPa at 20 degrees C (68 degrees F) 1.07 g/m3 at 21 degrees C (68 degrees F) moderately soluble |

10. STABILITY AND REACTIVITY

| 10.0 General information: | If stored and handled in accordance with standard industrial practices no hazardous reactions are known. |
|----------------------------------|--|
| 10.1 Conditions to avoid: | None known. |
| 10.2 Materials to avoid: | None known. |
| 10.3 Hazardous decomposition | products: If stored and handled in accordance with standard industrial practices and local |
| | regulations where applicable: none known. At increased temperature: acetic acid. |
| 10.4 Further information: | Hazardous polymerization cannot occur. |
| | |
| | |

11. TOXICOLOGICAL INFORMATION

Toxicological testing has been conducted with similar product(s).

11.1 General information:

11.2 Toxicological data:

Serious eye dama

Acute toxicity (LD50/LC50-values relevant to classification).

| (LD50/LC50-values relevant to classification). | | | |
|--|-------------------|------------------------------|---------------|
| Exposition | Value/value range | Species | Source |
| | | | Conclusion by |
| | | | analogy |
| Oral | LD 50:>2000 mg/kg | rat (limit test) | OECD423 |
| | Exposition | Exposition Value/value range | |

11.3 Skin corrosion/irritation: For this endpoint no toxicological test data is available for the whole product.

| | | Value/value range | Species | Source | |
|---------|-------------------|------------------------------|---------------------------|-------------------|----------|
| | | | | Conclusion by | |
| | | | | analogy | |
| | | Not irritating | rabbit | OECD404 | |
| age/eye | e irritation: For | r this endpoint no toxicolog | gical test data is availa | ble for the whole | product. |
| | | Value/value range | Species | Source | |

| Value/value range | Species | Source |
|-------------------|---------|---------------|
| | | Conclusion by |
| | | analogy |
| Not irritating | rabbit | OECD405 |

11.4 Respiratory or skin sensitization: For this endpoint no toxicological test data is available for the whole product. For this endpoint no toxicological test data is available for the whole product.

Data related to ingredients:

5-Chloro-2-methyl-4-isothiazoline-3-on and 2-methyl-4-isothiazoline-3-on (mixture in a ratio of 3:1):

Based on the proven low sensitization induction threshold in human, mixtures containing ≥ 15 ppm are classified as skin sensitizing in Europe.

11.5 Germ cell mutagenicity: For this endpoint no toxicological test data is available for the whole product.

| Value/value range | Species | Source |
|-------------------|--------------------|---------------|
| | Mutation assay (in | Conclusion by |
| | vitro) | analogy |
| negative | Bacterial cells | OECD471 |

11.6 Carcinogenicity: For this endpoint no toxicological test data is available for the whole product.

11.7 Reproductive toxicity: For this endpoint no toxicological test data is available for the whole product.

11.8 Specific target organ toxicity (single or repeated exposure): For this endpoint no toxicological test data is available for the whole product.

11.9 Aspiration hazard: For this endpoint no toxicological test data is available for the whole product.

11.10: Further toxicological information. Other information: During manufacture and use: No information on damage to health. Remark for the listed toxicological data: Evaluation in analogy to similar product.

12. ECOLOGICAL INFORMATION

12.1 Toxicity Assessment: No expected damaging effects to aquatic organisms. According to current knowledge adverse effects on water purification plants are not expected.

Product details:

| Result/Effect | Species/Test system | Source |
|--------------------------------|--|--------------------------------------|
| LC ₅₀ : > 100 mg/l | rainbow trout (Oncorhynchus mykiss) (96 h) | Conclusion by analogy OECD 203 |
| EC ₁₀ : > 1000 mg/l | sludge (0.5 h) | Conclusion by analogy |

Information on elimination (persistence and degradability)

| Biodegradation/further information: | Not readily biodegradable. |
|---|---|
| Further information: | Polymer component: Elimination by adsorption to activated sludge. |
| | Separation by flocculation is possible. |
| 12.2 Behavior in environmental compartments | |
| Mobility: | - |
| Further information: | No adverse effects expected. |
| 12.3 Mobility in soil: | |
| According to current knowledge adverse effect | cts of water purification plants are not expected. |
| 12.4 Other adverse effects: None known | |
| | |

12.5 Additional information

The ecotoxicological results provided were obtained from tests with similar products.

13. DISPOSAL CONSIDERATIONS

13.1 Product disposal: Dispose of according to regulations by incineration in a special waste incinerator. Small quantities may be disposed of by incineration in an approved facility. Observe local/state/federal regulations.
 13.2 Packaging disposal: Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be

recycled or re-used. Observe local/state/federal regulations.

Recommended cleaning agent: Water

14. TRANSPORT INFORMATION

14.1 US DOT & CANADA TDG SURFACE

| Valuation: | Not regulated for transport |
|-------------------------------------|--|
| Other information: | Protect from freezing, when exposed to cold temperatures approaching 0 C (32 degrees |
| | F) or below. |
| 14.2 Transport by sea IMDG-Code | |
| Valuation: | Not regulated for transport |
| 14.3 Air transport ICAO-TI/IATA-DGR | |
| Valuation: | Not regulated for transport |

15. REGULATORY INFORMATION

| 15.1 U.S. Federa | l regulations | | | |
|--|--------------------|-------------------|--|--|
| TSCA inventory status and TSCA information: | | information: | This material or its components are listed on or are in compliance with the | |
| | | | requirements of the TSCA Chemical Substance Inventory. | |
| TSCA 12(b) Export Notification: | | | This material does not contain any TSCA 12(b) regulated chemicals. | |
| CERCLA Regulated Chemicals: | | | This material does not contain an CERCLA regulated chemicals. | |
| SARA 302 EHS Chemicals: | | | This material does not contain any SARA extremely hazardous substances. | |
| SARA 313 Chemicals: | | | This material does not contain any SARA 313 chemicals above the minimum levels. | |
| HAPS (Hazardou | s Air Pollutants): | | | |
| CAS No: | Chemical: | Upper limit wt. | % | |
| 108-05-4 | Vinyl Acetate | 0.099 | | |
| 50-00-0 | Formaldehyde | 0.022 | | |
| | | | | |
| 15.2 U.S. State r | egulations | | | |
| California Propos | sition 65 Carcinog | ens: | 50-00-0 Formaldehyde | |
| California Proposition 65 Reproductive Toxins: | | ctive Toxins: | This material does not contain any chemicals known to the state of California to cause reproductive effects. | |
| Massachusetts Substance List: | | | This material contains no listed components. | |
| New Jersey Right-to-Know Hazardous Substance List: | | Substance List: | This material contains no listed components. | |
| Pennsylvania Right-to-Know Hazardous Substance List: | | | This material contains no listed components. | |
| | | | - | |
| 15.3 Canadian r | egulations | | | |
| | | accordance with t | he Hazard criteria of the CPR and the MSDS contains all the information | |
| required by the C | | | | |
| WHMIS Hazard | Classes: | None | | |
| DSL Status: | | | terial or its components are listed on the Canadian Domestic Substances List. | |
| Non-DSL Chemi | cals: | | terial does not contain any non-DSL chemicals. | |
| Canadian Ingredi | ent Disclosure Lis | st: This ma | terial contains no listed components. | |
| | | | | |
| 15.4 Other international regulations | | | | |

Relevant information about individual substance inventories, where available, is given below.

| South Korea (Republic of Korea):: ECL (Existing Chemicals List): This product is listed in, or complies with, the substance inventory. Australia:: AICS (Australian Inventory of Chemical Substances): This product is listed in, or complies with, the substance inventory. |
|---|
| People's Republic of China |
| This product is listed in, or complies with, the substance inventory |
| Canada: DSL (Domestic Substance List): |
| This product is listed in, or complies with, the substance inventory. |
| Philippines |
| This product is listed in, or complies with, the substance inventory. |
| United States of America (USA): TSCA (Toxic Substance Control Act Chemical Substance Inventory): |
| This product is listed in, or complies with, the substance inventory. |
| European Economic Area (EEA): REACH (Regulation (EC) No 1907/2006): |

General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter

16. OTHER INFORMATION

16.1 Additional information:

This Safety Data Sheet (SDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR. This information relates to the specific material designated and ma not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This SDS provides selected regulatory information on this product, including its components.

Sundek Additive

16.2 Glossary of Terms:

ACGIH – American Conference of Governmental Industrial Hygienists DOT – Department of Transportation hPa – Hectopascals mPa*s – Milli Pascal-Seconds OSHA – Occupational Safety and Health Administration PEL – Permissible Exposure Limit

Flash point determination methods ASTM D56 ASTM D92, DIN 51376, ISO 2592 ASTM D93, DIN 51758, ISO 2719 ASTM D3278, DIN 55680, ISO 3679 DIN 51755

16.3 Conversion table:

| Pressure: | 1 hPa * 0.75 = 1 mm Hg = 1 Torr; 1 bar = 1000 hPa |
|------------|---|
| Viscosity: | 1 mPa*s = 1 Centipoise (Cp) |

Disclaimer:

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ppm – Parts per Million SARA – Superfund Amendments and Reauthorization Act STEL – Short Term Exposure Limit TSCA – Toxic Substances Control Act TWA – Time Weighted Average WHMIS – Canadian Workplace Hazardous Materials Identification System

Common Name

Tagliabue (Tag) closed cup Cleveland open cup Pensky-Martens closed cup Setaflash or Rapid closed cup Abel-Pensky closed cup