

Safety Data Sheet

**Product No. 18022 Dodecenyl Succinic Anhydride
(DDSA)**

Issue Date (04-08-15)

Review Date (09-25-15)

Section 1: Product and Company Identification

Product Name: Dodecenyl Succinic Anhydride (DDSA),

Synonym: Dodecenyl Succinic Anhydride (DDSA), Specially Distilled

Chemical Family: Alkenyl Anhydride.

Product Use: Epoxy Curing Agent, Application of the substance / the preparation
Laboratory chemicals.

Company Name

Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477

**Domestic Phone (800) 237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to
4:00PM PST)**

**International Phone (01) (530) 243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri
6:00AM to 4:00PM PST)**

Chemtrec Emergency Number 1-800-424-9300 24 hrs a day.

Section 2: Hazard Identification

2.1 Classification of the substance or mixture

GHS Pictograms



GHS Categories

GHS07: Irritant

Acute Tox. 4 H302: Harmful if swallowed.

Acute Tox. 4 H312: Harmful in contact with skin.

Acute Tox. 4 H332: Harmful if inhaled.

STOT SE 3 H335: May cause respiratory irritation.

2.2. Label elements

The product is classified and labeled according to the CLP regulation.

Hazard Pictograms



GHS07

Signal word: Warning

Hazard statements

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
H335 May cause respiratory irritation.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P322 Specific measures (see on this label).
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Health Effects:

NFPA Hazard Rating: Health: 2; Fire: 1; Reactivity: 0
HMIS Hazard Rating: Health: 2; Fire: 1; Reactivity: 0
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Emergency overview

Appearance: Light Yellow Liquid.

Immediate effects: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Potential health effects

Primary Routes of entry: Inhalation, skin and eye contact.

Signs and Symptoms of Overexposure: ND

Eyes: Irritating to eyes.

Skin: May be irritating.

Ingestion: Harmful if swallowed.

Inhalation: Irritating respiratory system.

Chronic Exposure: NIF

Chemical Listed As Carcinogen Or Potential Carcinogen: None.

See Toxicological Information (Section 11)

Potential environmental effects

See Ecological Information (Section 12)

Section 3: Composition / Information on Ingredients

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

Principle Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m ³	ACGIH TLV mg/m ³	NTP	IARC	OSHA regulated
Dodecyl Succinic Anhydride (26544-38-7)	<100	ND	ND	No	No	No
Dodecyl Succinic Acid (27859-58-1)	ND	ND	ND	No	No	No

Dangerous components: Void

Section 4: First Aid Measures

If accidental overexposure is suspected

General information: Symptoms of poisoning may even occur after several hours; therefore, medical observation for at least 48 hours after the accident.

Eye(s) Contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Skin Contact: Generally the product does not irritate the skin.

Inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

Ingestion: Call for a doctor immediately.

Note to physician

Treatment: Most important symptoms and effects, both acute and delayed: No further relevant information available.

Medical Conditions generally Aggravated by Exposure: No further relevant information available.

Section 5: Fire Fighting Measures

Flash Point: 167 °C

Flammable Limits: ND

Auto-ignition point: Not self-igniting.

Fire Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.

Special Fire Fighting Procedures: No further relevant information available. Use mouth respiratory protective device.

Unusual Fire and Explosion Hazards: Product does not present an explosion hazard.

Hazardous combustion products: ND

DOT Class: Not regulated.

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Ensure adequate ventilation.

Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Large Spill: Shut off leak, if safe to do so. Contain spilled liquid with sand or

earth. Retain all contaminated water for removal and treatment. Clean up spills immediately.

Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

Section 7: Handling and Storage

Precautions to be taken in Handling and Storage: Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols. Keep container tightly sealed.

Storage temperature: No special requirements.

Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: Ensure good ventilation/exhaustion at the workplace.

Personal Protection Equipment

Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protective gloves: Wear suitable protective gloves. The glove material has to be impermeable and resistant to the product/the substance/the preparation.

Skin protection: Wear gloves.

Eye protection: Wear protective tightly sealed goggles.

Additional clothing and/or equipment: Wear appropriate clothing as required.

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the skin.

Exposure Guidelines

See Composition/Information on Ingredients (Section3)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Light yellow liquid.

Odor (threshold): Light (ND)

Specific Gravity (H₂O=1): 1.005 g/cm³

Vapor Pressure (mm Hg): ND

Vapor Density (air=1): ND

Percent Volatile by volume: 0.0%

Evaporation Rate (butyl acetate=1): ND

Boiling Point: 350 °C

Freezing point / melting point: NE

pH: ND

Solubility in Water: Insoluble.

Molecular Weight: NA

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: No further relevant information available.

Materials to Avoid (Incompatibility): No further relevant information available.

Hazardous Decomposition Products: No dangerous decomposition products known.

Hazardous Polymerization: No dangerous reactions known.

Section 11: Toxicological Information

Results of component toxicity test performed: ND

Primary irritant effect: On the skin: No irritant effect. On the eye: Irritating effect.

Human experience: No sensitizing effects known.

This product **does not** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

Section 12: Ecological Information

Toxicity: Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behavior in environmental systems: Bio accumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Chemical Fate Information: ND

Section 13 Disposal Considerations

RCRA 40 CFR 261 Classification: This material and its container must be disposed of as hazardous waste.

Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

Section 14: Transportation Information

US DOT Information: Proper shipping name: Not regulated.

IATA: Proper shipping name: Not regulated.

Marine Pollutant: No

Canadian TDG: Not regulated.

IMDG: Not regulated.

Section 15: Regulatory Information

United States Federal Regulations

SDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

SARA: Section 355 (extremely hazardous substances): None of the ingredients are listed.

SARA Title III: Section 313 (Specific toxic chemical listings): None of the ingredients are listed.

RCRA: None of the ingredients are listed.

TSCA: All ingredients are listed.

CERCLA: None of the ingredients are listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

State Regulations

California Proposition 65: None.

International Regulations

Canada WHMIS: Canadian Domestic Substances List (DSL) CAS# 27859-58-1, Tetrapropenyl Butanedioic Acid.

Canadian Ingredient Disclosure list (limit 0.1%): None of the ingredients are listed.

Europe EINECS Numbers: ND

Section 16: Other Information

Label Information: Harmful if swallowed, Irritating to eyes.

European Risk and Safety Phrases: Harmful R20/21/22: Harmful by inhalation, in contact with skin and if swallowed. Xi; Irritant

R36/37: Irritating to eyes and respiratory system.

European symbols needed:



Xn

Canadian WHMIS Symbols: D2B - Toxic material causing other toxic effects



Abbreviations used in this document

NE= Not established

NA= Not applicable

NIF= No Information Found

ND= No Data

Disclaimer

Ted Pella, Inc. makes no warranty of any kind regarding the information furnished herein. Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the User's responsibility to assure the proper use and disposal of these materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.