



SAFETY DATA SHEET

(according to (EC) 1907/2006)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

N-Octenyl Succinic Anhydride (J-8)

Synonyms:

Dihydro-3-(2-octenyl)-2,5-furandione

1.2. Relevant identified uses of the substance or mixture and uses advised against

Raw material
Industrial applications

1.3. Details of the supplier of the safety data sheet

Manufacturer Information: Vertellus Health & Specialty
Products LLC, P.O. Box 730,
Delaware Water Gap, PA 18327
USA

Non-Emergency Fax Number:

570-421-9012

E-Mail Address:

msds@vertellus.com

Non-Emergency Phone Number: 800-344-3426

1.4. Emergency telephone number

Vertellus: 800-344-3426
CHEMTREC (USA): (800) 424-9300
(collect calls accepted); (Int'l): (703) 527-3887
(collect calls accepted; 011 prefix not needed)

SECTION 2: Hazards identification

HMIS Rating

HEALTH 2

FLAMMABILITY 1

REACTIVITY 0

2.1. Classification of the substance or mixture

(According to Regulation (EC) No 1272/2008)

Serious Eye Damage/Eye Irritation Category 2

Skin Corrosion/Irritation Category 2

Signal Word:

Warning

Hazard Precautions:

H319 - Causes serious eye irritation.

H315 - Causes skin irritation.

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2.2. Label elements

Hazard Symbols (Pictogram):



Prevention Precautions:

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P264 - Wash hands thoroughly after handling.

First Aid Precautions:

P337+P313 - If eye irritation persists: Get medical advice/attention.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P362 - Take off contaminated clothing and wash before reuse.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P321 - Specific treatment (see supplemental information on this label).

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

Storage Precautions:

Not required.

Disposal Precautions:

Not required.

Single Exposure Target Organs:

Not applicable

Repeated Exposure Target Organs:

Not applicable

(According to Directive 67/548/EEC)

Symbol: Xi

Risk Phrases: R36/38: Irritating to eyes and skin.

Safety Phrases: S24/25: Avoid contact with skin and eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

2.3. Other hazards

Signs and Symptoms of Potential Overexposure: See Section 11 for further toxicological information.



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Primary Route(s) of Exposure: Inhalation. Ingestion. Eye contact. Skin contact.

Medical Conditions Aggravated by Exposure: Not available.

SECTION 3: Composition/information on ingredients

3.1. Substances or 3.2. Mixtures

Ingredient	CAS Number	Concentration (%)	EINECS / ELINCS	EU Symbol	Risk Phrases
2-Octenyl succinic anhydride	42482-06-4	100	247-899-8	Xi	R36/38

NOTE: See Section 8 of this MSDS for exposure limit data for these ingredients.
See Section 15 of this MSDS for trade secret information (where applicable).
See Section 16 of this MSDS for the full text of the R-phrases above.

SECTION 4: First aid measures

4.1. Description of first aid measures

Skin Contact: May cause skin irritation. Remove contaminated clothing and continue flushing with water. Get medical attention if irritation develops or persists.

Eye Contact: Can cause mild irritation.

Inhalation: Slightly irritating to the respiratory tract. Take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment, use the buddy system. Irritating to the nose, throat, and respiratory tract. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. Immediately transport victim to an emergency care facility

Ingestion: Have victim rinse mouth thorough with water if alert and capable. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Acute: See Section 11 for further toxicological information.

Delayed Effects: None known.

4.3. Indication of any immediate medical attention and special treatment needed

Thermal Exposure: Not applicable.

Note to Physician: No additional first aid information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate Extinguishing Media: Carbon dioxide Alcohol foam Water spray Foam

5.2. Special hazards arising from the substance or mixture

Hazardous Products of Combustion: Carbon dioxide, Carbon monoxide Irritating and/or toxic fumes may be released if this material is burned. Smoke

Potential for Dust Explosion: not available

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Special Flammability Hazards: Can burn in fire releasing toxic vapors.

5.3. Advice for firefighters

Basic Fire Fighting Guidance: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Flammability Classification (OSHA): Not applicable.

NFPA Rating



SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuation Procedures: Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Special Instructions: Remove all contaminated clothing to prevent further absorption. Decontaminate affected personnel using the first aid procedures in Section 4. Leather shoes that have been saturated must be discarded.

6.2. Environmental precautions

Prevent releases to soils, drains, sewers, and waterways.

6.3. Methods and material for containment and cleaning up

Containment Techniques and Clean-up Procedures: Avoid generation of dust clouds during clean-up. LARGE SPILLS: Shut off leak if safe to do so.

Special Reporting Requirements: Not applicable.

6.4. Reference to other sections

Refer to section 8 for information on selecting personal protective equipment. Refer to section 13 for information on spilled product, absorbent and clean up material disposal instructions.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for Unique Hazards: Not applicable.

Practices to Minimize Risk: Wear appropriate protective equipment when performing maintenance on contaminated equipment. Wash hands thoroughly before eating or smoking after handling this material.

Special Handling Equipment: Use with adequate ventilation. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage Precautions & Store in a cool dry place Keep container closed when not in use.



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Recommendations:

Dangerous Incompatibility Reactions: Strong oxidizing agents

Incompatibilities with Materials of Construction: none known

7.3. Specific end use(s)

If a chemical safety assessment has been completed an exposure scenario is attached as an annex to this Safety Data Sheet. Refer to this annex for the specific exposure scenario control parameters for uses identified in subsection 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits (United States): OSHA PEL: Not established ACGIH TLV: Not established

8.2. Exposure controls

Also see the annex to this SDS (if applicable) for specific exposure scenario controls.

Personal Protective Equipment: Wear impervious gloves (i.e., latex rubber), boots, work uniform and safety glasses. Impermeable gloves and safety goggles should be worn at all times.

Respirator Caution: Observe OSHA regulations for respirator use (29 CFR 1910.134). Air-purifying respirators must not be used in oxygen-deficient atmospheres.

Ventilation: All operations should be conducted in well-ventilated conditions. Local exhaust ventilation should be provided. Use process enclosures to control the level of dust in the air.

Other Engineering Controls: All appropriate engineering controls should be used to minimize exposure potential. Use exhaust ventilation to keep airborne concentrations below exposure limits.

Thermal Hazards: Not applicable.

Additive or Synergistic Effects: None known.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance, State & Odor (ambient temperature): Clear, pale yellow to pink liquid with a slight odor.

Molecular Formula: Not available.

Molecular Weight:

Vapor Pressure: < 1.00

Evaporation Rate: Not available.

Specific Gravity or Density: 1.000

Vapor Density (air = 1): 7.3

Boiling Point: 320 °C 608 °F

Freezing / Melting Point: 7.8 - 10 °C 46 - 50 °F Not available.

Solubility in Water: Insoluble

Octanol / Water Coefficient: Not available.

pH: Not available.

Odor Threshold: Not applicable

Viscosity: 44 cps @ 20°C (68°F)

Autoignition Temperature: Not available.

Flash Point and Method: 296°F (147°C) (Closed Cup)

Flammable Limits: Not available. (LEL) – Not available. (UEL)

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9.2. Other information

Not applicable.

SECTION 10: Stability and reactivity

<u>10.1. Reactivity</u>	Not classified as dangerously reactive.
<u>10.2. Chemical stability</u>	Stable under normal conditions.
<u>10.3. Possibility of hazardous reactions</u>	Not expected to occur.
<u>10.4. Conditions to avoid</u>	No data.
<u>10.5. Incompatible materials</u>	Strong oxidizing agents
<u>10.6. Hazardous decomposition products</u>	Hydrogen chloride Nitrogen containing gases carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Oral LD ₅₀ :	Oral LD ₅₀ (rat) = 2550 mg/kg
Acute Dermal LD ₅₀ :	Dermal LD ₅₀ (rabbit) = 6200 mg/kg
Acute Inhalation LC ₅₀ :	Not available.
Skin Irritation:	Irritating to the skin.
Skin Sensitization:	A similar substance causes skin sensitization in animal tests. No sensitization reactions have been observed with occupational exposure to this substance.
Eye Irritation:	Moderately irritating to eyes.
Target Organs:	Not applicable
Carcinogenicity:	No data available.
Teratogenicity:	Not available.
Reproduction:	Not available.
Neurotoxicity:	No data available.
Mutagenicity:	No data available.

SECTION 12: Ecological information

<u>12.1. Toxicity</u>	Not available.
<u>12.2. Persistence and degradability</u>	No data No data available.
<u>12.3. Bioaccumulative potential</u>	No data



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<u>12.4. Mobility in soil</u>	No data
<u>12.5. Results of PBT and vPvB assessment</u>	Not available.
<u>12.6. Other adverse effects</u>	No data available. Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

US EPA Waste Number: Not applicable

Waste Disposal: Dispose of this material in accordance with standard practice for disposal of potentially hazardous materials as required by applicable international, national, regional, state or local laws. Do NOT dump into any sewers, on the ground, or into any body of water. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used. Note that disposal regulations may also apply to empty containers and equipment rinsates.

SECTION 14: Transport information

<u>14.1. UN number</u>	Not applicable
<u>14.2. UN proper shipping name</u>	Chemicals, n.o.s. (N-Octenylsuccinic Anhydride)
<u>14.3. Transport hazard class(es)</u>	Not applicable
<u>14.4. Packing group</u>	Not applicable
<u>14.5. Environmental hazards</u>	Not applicable
<u>14.6. Special precautions for user</u>	Not available.
NA Emergency Guidebook Numbers: Not applicable	IMDG EMS: Not applicable
<u>14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</u>	Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

OSHA Hazards: Health: Irritant. Physical: Not applicable.

WHMIS Classification: Class D, Division 2, Subdivision B: Irritant.

Chemical Inventory Lists: Status
TSCA: Present
EINECS: Not listed.
Canada(DSL/NDSL): NDSL



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Japan:	Not listed.
Korea:	Not listed.
Australia:	Not listed.
New Zealand:	Not listed.
China:	Not listed.
Philippines:	Not listed.
Switzerland:	Not listed.

New Zealand GHS Classification: Not classified by this country.

Japan GHS Classification: Not classified by this country.

Korea (MOL) GHS Classification: Not classified by this country.

Australia GHS Classification: Not classified by this country.

Taiwan GHS Classification: Not classified by this country.

Indonesia GHS Classification: Not classified by this country.

SARA 313: 15SARAH010
15SARAH020

15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information

Full text of R phrases in Section 3: R36/38: Irritating to eyes and skin.



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Legend of abbreviations:

ACGIH = American Conference on Governmental Industrial Hygienists.
CAS = Chemical Abstracts Service.
CERCLA = Comprehensive Environmental, Response, Compensation and Liability Act (1990).
CFR = Code of Federal Regulations.
DSL/NDL = Domestic Substances List/Non-Domestic Substances List.
EC = European Community.
EEC = European Economic Community.
EINECS = European Inventory of Existing Commercial chemical Substances.
ELINCS = European List of Notified Chemical Substances.
EU = European Union.
GHS = Globally Harmonized System.
LC = Lethal concentration.
LD = Lethal dose.
MOL = Ministry of Labor.
NEMA = National Emergency Management Agency.
NFPA = National Fire Protection Association.
NIOSH = National Institute of Occupational Safety and Health.
NTP = National Toxicological Program.
OSHA = Occupational Safety and Health Administration
PEL = Permissible exposure limit.
RQ = Reportable quantity.
SARA = Superfund Amendments and Reauthorization Act of 1986.
TLV = Threshold limit value.
WHMIS = Workplace Hazardous Materials Information System.

Precautionary Statement: Please note that the information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.

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