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**SECTION 1. IDENTIFICATION**

**Product identifier**

Trade name : Advantage™ 831  
Defoaming Agent  
™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries

**Recommended use of the chemical and restrictions on use**

<p><b>Details of the supplier of the safety data sheet</b> Solenis LLC 500 Hercules Road Wilmington, Delaware 19808 United States of America (USA)</p> <p>RegulatoryRequestsNA@solenis.com</p>	<p><b>Emergency telephone number</b> 1-844-SOLENIS (844-765-3647)</p> <p><b>Product Information</b> Contact your local Solenis representative</p>
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**SECTION 2. HAZARDS IDENTIFICATION**

**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

**GHS label elements**

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

**Other hazards**

None known.


**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Components**

Chemical name	CAS-No.	Classification	Concentration (%)
HYDROTREATED PARAFFINIC DISTILLATE, DEWAXED	Trade Secret	Not a hazardous substance or mixture.	>= 80 - < 90

Actual concentration is withheld as a trade secret

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#### SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : No symptoms known or expected.
- Notes to physician : No hazards which require special first aid measures.

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#### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO2)  
Dry chemical
- Specific hazards during firefighting : If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release.  
Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon monoxide  
Carbon dioxide (CO2)  
formaldehyde  
Hydrocarbons
- Specific extinguishing methods : Product is compatible with standard fire-fighting agents.

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Further information : Standard procedure for chemical fires.

Special protective equipment : In the event of fire, wear self-contained breathing apparatus for firefighters

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### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Comply with all applicable federal, state, and local regulations.

Environmental precautions : Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

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### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8.

Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : No materials to be especially mentioned.

Further information on storage stability : No decomposition if stored and applied as directed.

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### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
HYDROTREATED PARAFFINIC DISTILLATE, DEWAXED	Trade Secret	TWA (Mist)	5 mg/m <sup>3</sup>	OSHA Z-1
		TWA (Inhalable particulate)	5 mg/m <sup>3</sup>	ACGIH

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		matter)		
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL

**Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

**Personal protective equipment**

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection : Wear as appropriate:  
 Safety shoes  
 Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : General industrial hygiene practice.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : viscous

Colour : light grey

Odour : slight, oily

Odour Threshold : No data available


pH : No data available

Melting point/freezing point : < 32 °F / < 0 °C

Boiling point/boiling range : 694 - 840 °F / 368 - 449 °C

Flash point : ca. 385 °F / 196 °C

Evaporation rate : < 1

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n-Butyl Acetate

Flammability (solid, gas)	: No data available
Self-ignition	: No data available
Upper explosion limit / Upper flammability limit	: 6 %(V)
Lower explosion limit / Lower flammability limit	: 1 %(V)
Vapour pressure	: < 0.001 hPa (68 °F / 20 °C)
Relative vapour density	: > 1 AIR=1
Relative density	: No data available
Density	: 0.91 g/cm3
Solubility(ies)	
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Decomposition temperature	: No data available
Viscosity	
Viscosity, dynamic	: 500 - 2,250 mPa.s (77 °F / 25 °C)
Viscosity, kinematic	: No data available
Oxidizing properties	: No data available

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**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: Product will not undergo hazardous polymerization.
Conditions to avoid	: excessive heat
Incompatible materials	: Strong acids Strong oxidizing agents

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Hazardous decomposition products : Carbon monoxide  
Carbon dioxide (CO2)  
Hydrocarbons  
Formaldehyde

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## SECTION 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Not classified based on available information.

#### Product:

Acute oral toxicity : LD50 (Rat): Expected > 2,000 mg/kg

Acute dermal toxicity : LD50 (Rat): Expected > 2,000 mg/kg

#### Components:

##### **HYDROTREATED PARAFFINIC DISTILLATE, DEWAXED:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

### Skin corrosion/irritation

Not classified based on available information.

#### Components:

##### **HYDROTREATED PARAFFINIC DISTILLATE, DEWAXED:**

Result : Slightly irritating to skin

### Serious eye damage/eye irritation

Not classified based on available information.

#### Product:

Remarks : Unlikely to cause eye irritation or injury.

#### Components:

##### **HYDROTREATED PARAFFINIC DISTILLATE, DEWAXED:**

Result : Slightly irritating to eyes


### Respiratory or skin sensitisation

#### **Skin sensitisation**

Not classified based on available information.

#### **Respiratory sensitisation**

Not classified based on available information.

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**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

**HYDROTREATED PARAFFINIC DISTILLATE, DEWAXED:**

Genotoxicity in vitro : Test Type: Ames test  
 Result: negative

**Carcinogenicity**

Not classified based on available information.

**IARC** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**NTP** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

**Product:**

No aspiration toxicity classification

**Further information**

**Product:**

Remarks : No data available


**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Product:**

Toxicity to fish : LC50 (Fish): Expected > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates : EC50 (Aquatic invertebrates): Expected > 100 mg/l

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EC50 (Daphnia magna (Water flea)): 5,513 mg/l  
 Exposure time: 48 h  
 Test Type: static test  
 Test substance: Test conducted with a similar formulation

Toxicity to microorganisms : EC10 (Bacteria): Expected > 100 mg/l

**Ecotoxicology Assessment**

Acute aquatic toxicity : Not classified based on available information.

Chronic aquatic toxicity : Not classified based on available information.

**Persistence and degradability**

**Product:**

Biodegradability : Biodegradation: < 70 %  
 Exposure time: 28 d  
 Method: OECD Test Guideline 301D  
 Remarks: Not readily biodegradable.

Biochemical Oxygen Demand (BOD) : Biochemical oxygen demand within 5 days  
 ca. 200 g/l  
 Incubation time: 5 d

Chemical Oxygen Demand (COD) : ca. 2,000 g/l

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Other adverse effects**

**Product:**

Additional ecological information : No data available

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**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.



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## SECTION 14. TRANSPORT INFORMATION

### International Regulations

#### IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### National Regulations

#### 49 CFR

Not regulated as a dangerous good

#### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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## SECTION 15. REGULATORY INFORMATION

### EPCRA - Emergency Planning and Community Right-to-Know Act

#### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### California Prop. 65

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

#### The components of this product are reported in the following inventories:


TCSI : On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

AIIC : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL

ENCS : On the inventory, or in compliance with the inventory

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KECI : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

NZIOC : On the inventory, or in compliance with the inventory

#### TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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## SECTION 16. OTHER INFORMATION

### Further information

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### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA P0 : USA. OSHA - TABLE Z-1 Limits for Air Contaminants -  
1910.1000

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1  
Limits for Air Contaminants

ACGIH / TWA : 8-hour, time-weighted average


NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour  
workday during a 40-hour workweek

NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded  
at any time during a workday

OSHA P0 / TWA : 8-hour time weighted average

OSHA Z-1 / TWA : 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -

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International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Safety Data Sheet

Key literature references and sources of data

SOLENIS Internal data

SOLENIS internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This SDS has been prepared by the Solenis Environmental Health and Safety Department.

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