

SAFETY DATA SHEET

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

1.1. Product identifier Octadecane
Synonyms: n-Octadecane, A18T, A18 HP
Chemical Abstracts Registry No: 593-45-3

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

No data available.

1.3. Details of the supplier of the safety data sheet

Vertellus LLC
201 North Illinois Street, Suite 1800,
Indianapolis, IN 46204
800-223-0453

e-mail Address: sds@vertellus.com

1.4. Emergency telephone number **Vertellus:** 1-800-223-0453
CHEMTREC (USA): 1-800-424-9300 (collect calls accepted)
CHEMTREC (International): 1-703-527-3887 (collect calls accepted)
NRCC (China): +86 532 83889090

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

(According to Regulation (EC) No 1272/2008, 29 CFR 1910.1200 and the Globally Harmonized System)

Aspiration Hazard Category 1

2.2. Label elements

Hazard Symbols
(Pictogram):



Signal Word: Danger
Hazard Precautions: H304 - May be fatal if swallowed and enters airways.
First Aid Precautionary Statements: P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 - Do NOT induce vomiting.

SAFETY DATA SHEET

SECTION 3: Composition/information on ingredients

3.1. Substances or 3.2. Mixtures

Ingredient	CAS Number	Concentration (weight %)	EC Number	CLP Inventory/ Annex VI	EU CLP Classification (1272/2008)
Octadecane	593-45-3	90 - 100	209-790-3	Not listed	Asp. Tox. 1; H304

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

SECTION 4: First aid measures

4.1. Description of first aid measures

- Skin Contact:** Remove contaminated clothing. Wash affected area with soap and water. Rinse thoroughly. If irritation persists or other symptoms are observed, seek medical advice
- Eye Contact:** Immediately flush eyes with plenty of water for at least 20 minutes. Get immediate medical attention. Hold eyelids apart periodically while flushing.
- Inhalation:** Remove to fresh air. If breathing is difficult give oxygen and seek medical attention
- Ingestion:** If swallowed, contact physician or poison control center immediately. Do NOT induce vomiting. Do not give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

- Acute:** Risk of aspiration into the lungs during swallowing and vomiting; Not toxic by oral, dermal or inhalation routes. Not a sensitizer.
- Delayed Effects:** None known.

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

- Note to Physician:** Aspiration of this substance into the lungs during vomiting may result in aspiration of the light hydrocarbon liquid, which may cause pneumonitis.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Appropriate Extinguishing Media:** Carbon dioxide, Alcohol foam, Water fog

5.2. Special hazards arising from the substance or mixture

- Hazardous Products of Combustion:** Carbon dioxide, Carbon monoxide
- Potential for Dust Explosion:** not applicable
- Special Flammability Hazards:** None expected

SAFETY DATA SHEET

5.3. Advice for firefighters

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

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: See Section 8 for personal protective equipment recommendations. 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

Remove all ignition sources. Wear protective equipment during clean-up. Ventilate the area of spill or leak. After collection of material, flush area with water. Contain spilled liquid with sand or vermiculite and place in chemical waste container. Prevent runoff from entering drains, sewers, and streams. Dispose of contents & container in accordance with local, regional, national or international regulations.

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. Do not eat, drink or smoke in work areas. Prevent contact with incompatible materials. Avoid spills and keep away from drains. Handle in a manner to prevent generation of aerosols, vapors or dust clouds. Wear appropriate protective equipment when performing maintenance on contaminated equipment.

Special Handling Equipment: Not applicable

7.2. Conditions for safe storage, including any incompatibilities

Storage Precautions & Recommendations: Keep container closed when not in use. Store in a cool dry place. Isolate from incompatible materials.

Dangerous Incompatibility Reactions: Can react vigorously with oxidizing materials.

Incompatibilities with Materials of Construction: None known

SAFETY DATA SHEET

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

Occupational Exposure Limit: Not applicable

Air Monitoring Method: Not applicable.

8.2. Exposure controls

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

Other Engineering Controls: All operations should be conducted in well-ventilated conditions. Local exhaust ventilation should be provided. No exposure limits exist for the constituents of this product.

Personal Protective Equipment: Where overexposures are a concern, use NIOSH-approved dust/mist respirator as necessary. Latex rubber gloves are recommended where contact is likely. Safety glasses or goggles

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

Thermal Hazards: Not applicable.

Environmental Exposure Controls: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. 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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance, State & Odor (ambient temperature):	clear, colorless and odorless liquid.		
Molecular Formula:	C ₁₈ H ₃₈	Molecular Weight:	254.50
Vapor Pressure:	< 0.1 Pa @25°C	Evaporation Rate:	No data available
Specific Gravity or Density:	0.7818 g/cm ³ @25 °C	Vapor Density (air = 1):	No data available
Boiling Point:	316.3°C	Freezing / Melting Point:	82°F (28°C)
Solubility in Water:	0.006 mg/L @ 25°C	Octanol / Water Coefficient:	9.18 @ 25°C
pH:	No data available.	Odor Threshold:	No data available.
Viscosity:	No data available.	Autoignition Temperature:	235°C
Flash Point and Method:	> 300°F (> 149°C)	Flammable Limits:	No data available.
Flammability (solid, gas):	Not flammable	Decomposition Temperature:	> 235 °C

SAFETY DATA SHEET

Explosive Properties:

Not explosive

Oxidizing Properties:

Not an oxidizer

SECTION 10: Stability and reactivity

<u>10.1. Reactivity</u>	Not classified as dangerously reactive.
<u>10.2. Chemical stability</u>	Stable.
<u>10.3. Possibility of hazardous reactions</u>	Polymerization is not expected to occur
<u>10.4. Conditions to avoid</u>	Avoid contact with heat and ignition sources.
<u>10.5. Incompatible materials</u>	Can react vigorously with oxidizing materials.
<u>10.6. Hazardous decomposition products</u>	Incomplete combustion yields carbon monoxide, carbon dioxide and dense smoke.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Oral LD ₅₀ :	> 5000 mg/ kg (rat)
Acute Dermal LD ₅₀ :	> 3160 mg/ kg (rat)
Acute Inhalation LC ₅₀ :	5.8 mg/L (rat)(6hr)
Skin Irritation:	Non-irritating to skin.
Eye Irritation:	Non-irritating to eyes.
Skin Sensitization:	Not a sensitizer
Mutagenicity:	Negative in Ames Assay, both with and without metabolic activation.
Reproductive / Developmental Toxicity:	No evidence of reproductive effects
Carcinogenicity:	No evidence of carcinogenic effects
Target Organs:	None known.
Aspiration Hazard:	If ingested, material may be aspirated into the lungs and cause chemical pneumonitis
Primary Route(s) of Exposure:	Skin contact and absorption, eye contact, and inhalation. Ingestion is not likely to be a primary route of exposure.
Most important symptoms and effects, both acute and delayed	Risk of aspiration into the lungs during swallowing and vomiting; Not toxic by oral, dermal or inhalation routes. Not a sensitizer. Delayed Effects: None known.
Additive or Synergistic effects:	None known.

SECTION 12: Ecological information

<u>12.1. Toxicity</u>	EC50 (3h) Activated Sludge > 100 mg/L LC50 (96h) fish > 1028 mg/L LC50 (48h) Crustacean > 3193 mg/L
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SAFETY DATA SHEET

<u>12.2. Persistence and degradability</u>	Estimated to be photodegradable and biodegradable.
<u>12.3. Bioaccumulative potential</u>	Bioconcentration is not expected to occur.
<u>12.4. Mobility in soil</u>	This material is expected to have essentially no mobility in soil. It absorbs strongly to most soil types.
<u>12.5. Results of PBT and vPvB assessment</u>	This substance is not a PBT or vPvB.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

US EPA Waste Number:	Non-Hazardous
Waste Classification: (per US regulations)	The waste may be classified as "special" or hazardous per State regulations.
Waste Disposal:	NOTE: Generator is responsible for proper waste characterization. State hazardous waste regulations may differ substantially from federal regulations. Dispose of this material responsibly, and in accordance with standard practice for disposal of potentially hazardous materials as required by applicable international, national, regional, state or local laws, and environmental protection duty of care principles. Do NOT dump into any sewers, on the ground, or into any body of water. For disposal within the EC, the appropriate classification code according to the European Community List of Wastes should be used. Note that disposal regulations may also apply to empty containers and equipment rinsates.

SECTION 14: Transport information

The following information applies to all shipping modes (DOT/IATA/ICAO/IMDG/ADR/RID/ADN), unless otherwise indicated:

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

SECTION 15: Regulatory information

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

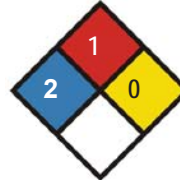
Chemical Inventory Lists:	Status:		
USA TSCA:	Listed	EINECS:	209-790-3
Canada(DSL/NDSL):	DSL	Japan:	Listed
Korea:	KE-26327	Australia:	Listed
China:	Listed	Philippines:	Listed

SAFETY DATA SHEET

Taiwan: Listed
 SARA 313: Not applicable
 HMIS:

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0

New Zealand: Listed
 NFPA:



15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information

CLP Classification Method On basis of test data

Legend of Abbreviations:

ACGIH = American Conference on Governmental Industrial Hygienists.
 CAS = Chemical Abstracts Service.
 CFR = Code of Federal Regulations.
 DSL/NDSL = Domestic Substances List/Non-Domestic Substances List.
 EC = European 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.
 NFPA = National Fire Protection Association.
 NIOSH = National Institute of Occupational Safety and Health.
 NTP = National Toxicology 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.

Important Note: 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. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. The information contained herein may change without prior notice. THIS SAFETY DATA SHEET SUPERSEDES ALL PREVIOUS EDITIONS.

Revision Date: 05 Jul 2016 Original Date of Issue: 22 Aug 2005
 Issued by: Regulatory Management Department Email: SDS@Vertellus.com
 Revision Details: Revised synonyms