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(according to (EC) 1907/2006)

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

1.1. Product identifier

Dibutyl Sebacate

Synonyms: DBS Casflex DBS

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

1.3. Details of the supplier of the safety data sheet

Manufacturer Information: Vertellus LLC
201 North Illinois Street, Suite 1800,
Indianapolis, IN 46204

Non-Emergency Phone Number: 336-292-1781

Non-Emergency Fax Number: 336-854-4058

E-Mail Address: msds@vertellus.com

1.4. Emergency telephone number

Vertellus: 336-292-1781
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	0
FLAMMABILITY	1
REACTIVITY	0

2.1. Classification of the substance or mixture

(According to Regulation (EC) No 1272/2008)
Not classified as hazardous under this directive.

Signal Word:
Not required.

Hazard Precautions:
Not classified as hazardous under this directive.

2.2. Label elements

Prevention Precautions:
Note: These preacutionary statements are not prescribed by directive 1272/2008 as this product is not classified as hazardous under this

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directive. Wash hands thoroughly after handling with soap and water. Wear protective gloves, protective clothing, eye protection and face protection. If swallowed, in eyes, on skin or inhaled call a poison center or doctor/physician if you feel unwell. If inhaled, remove victim to fresh air and keep at rest in a comfortable position for breathing. Take off contaminated clothing before reuse. Store in a well-ventilated place. Keep container tightly closed.

First Aid Precautions:
Not required.

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: Not classified as hazardous under this directive.
Risk Phrases: Not classified as hazardous under this directive.
Safety Phrases: Not classified as hazardous under this directive.

2.3. Other hazards

Signs and Symptoms of Potential Overexposure: Contact with this material may cause skin irritation. Contact with eyes may cause slight irritation. May be harmful if ingested in sufficient quantities. High gas, vapor, or mist concentrations may be harmful if inhaled.

Primary Route(s) of Exposure: Skin contact. None Known Ingestion. Inhalation.

Medical Conditions Aggravated by Exposure: No data found

SECTION 3: Composition/information on ingredients

3.1. Substances or 3.2. Mixtures

Ingredient	CAS Number	Concentration (%)	EINECS / ELINCS	EU Symbol	Risk Phrases
Dibutyl Sebacate	109-43-3	100.000000	203-672-5	N/A	N/A

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

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Skin Contact: Wash thoroughly after skin contact.

Eye Contact: Immediately flush the eyes with plenty of water for at least 15 minutes. Call a physician.

Inhalation: Remove from exposure. If not breathing, give artificial respiration and call a physician. Seek medical advice if symptoms persist.

Ingestion: If swallowed, do not induce vomiting. Get prompt medical attention.

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

Acute: Contact with this material may cause skin irritation. Contact with eyes may cause slight irritation. May be harmful if ingested in sufficient quantities. High gas, vapor, or mist concentrations may be harmful if inhaled.

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: Foam Dry chemical Carbon dioxide Water spray

5.2. Special hazards arising from the substance or mixture

Hazardous Products of Combustion: As with other organic materials, combustion will produce carbon monoxide and carbon dioxide.

Potential for Dust Explosion: not available

Special Flammability Hazards: Not applicable.

5.3. Advice for firefighters

Basic Fire Fighting Guidance: Wear self-contained breathing apparatus and protective clothing. Normal firefighting procedures may be used.

Flammability Classification (OSHA): Combustible Liquid - Class III B

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

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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: Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Remove all ignition sources. Ventilate the area of spill or leak. Wear protective equipment during clean-up. For small spills, use suitable absorbent material and collect for later disposal. For large spills, the area may require diking to contain the spill. Material can then be collected (eg., suction) for later disposal. After collection of material, flush area with water. Dispose of the material in accordance with standard practice for disposal of potentially hazardous materials as required by applicable federal, state or local laws.

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: Not applicable.

7.2. Conditions for safe storage, including any incompatibilities

Storage Precautions & Recommendations: This product should be stored at ambient temperature in a dry, well-ventilated location. Keep container closed when not in use.

Dangerous Incompatibility Reactions: Oxidizing materials

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

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

Personal Protective Equipment:	Impervious gloves, boots, and clothing, chemical goggles or face shield where necessary, and a NIOSH approved chemical cartridge respirator or supplied air breathing apparatus.
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.
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, oily liquid		
Molecular Formula:	C18H34O4	**Molecular Weight:**	314.47
Vapor Pressure:	0.0000047 mm Hg @ 25°C	**Evaporation Rate:**	< 1 (Butyl Acetate = 1)
Specific Gravity or Density:	0.936	**Vapor Density (air = 1):**	10.8
Boiling Point:	345 °C	**Freezing / Melting Point:**	-12 °C -10 °F
Solubility in Water:	< 0.1%	**Octanol / Water Coefficient:**	Not available.
pH:	Not available.	**Odor Threshold:**	N
Viscosity:	Not available.	**Autoignition Temperature:**	690°F (365°C)
Flash Point and Method:	353°F (178°C) (COC)	**Flammable Limits:**	Not available (LEL) – Not available (UEL)

9.2. Other information

Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity	Not classified as dangerously reactive.
10.2. Chemical stability	Stable
10.3. Possibility of hazardous reactions	Will not occur.
10.4. Conditions to avoid	No data.
10.5. Incompatible materials	Oxidizing materials
10.6. Hazardous decomposition products	As with other organic materials, combustion will produce carbon monoxide and carbon dioxide.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Oral LD_{50}:	Oral LD50 (rat) = 14870 mg/kg Oral LD50 (rat) = 16000 mg/kg Oral LD50 (rat) = 16000 - 32000 mg/kg Oral LD50 (mouse) = 19500 mg/kg
Acute Dermal LD_{50}:	Not available.
Acute Inhalation LC_{50}:	Inhalation LC50 (4h) (rat) > 5400 µg/m3 Inhalation LC50 (2h) (mouse) > 5400 µg/m3
Other Toxicity Data:	Intraperitoneal LD50 (mouse) = 13759 mg/kg
Skin Irritation:	May cause slight irritation.
Skin Sensitization:	No data available.
Eye Irritation:	May cause slight irritation.
Target Organs:	TDLo (oral, rat) = 66,000 mg/kg/30D-I TDLo (unreported route, rabbit) = 50,400 mg/kg/12W-I Possible changes in red blood cells.
Carcinogenicity:	This material is not listed by IARC, NTP or OSHA as a carcinogen. No test data is available that indicates this material is a carcinogen.
Teratogenicity:	TDLo (oral, rat) = 418,000 mg/kg (males dosed 10 wks pre-mating; females dosed 10 days pre-mating). Resulted in changes in growth statistics and weight gain in offspring.
Reproduction:	A single study showed massive oral exposures to male and female rats (418,000 mg/kg) resulted in decreased pup weight gain.
Neurotoxicity:	No data available.
Mutagenicity:	This material has been determined to be non-mutagenic in the Ames reverse mutation assay.

SECTION 12: Ecological information

12.1. Toxicity	Not available.
12.2. Persistence and degradability	No data No data available.
12.3. Bioaccumulative potential	No data
12.4. Mobility in soil	No data
12.5. Results of PBT and vPvB assessment	Not available.
12.6. Other adverse effects	No data available. Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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US EPA Waste Number: Not applicable

Waste Classification: (per US regulations) Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.
NOTE: Generator is responsible for proper waste characterization. State (USA) hazardous waste regulations may differ substantially from federal (USA) regulations.

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

14.1. UN number	Not applicable
14.2. UN proper shipping name	Chemicals, n.o.s. (Dibutyl Sebacate)
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 available.

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

OSHA Hazards: Non-hazardous Not applicable.

WHMIS Classification: This product is not classified as a controlled product under Canadian Controlled Products Regulations.

Chemical Inventory Lists:	Status
TSCA:	Yes
EINECS:	Yes
Canada(DSL/NDSL):	DSL
Japan:	2-879X
Korea:	KE-09410
Australia:	Yes
New Zealand:	Present
China:	Yes
Philippines:	Yes
Switzerland:	G-3244

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New Zealand GHS Classification:	6.8B, 6.9B oral (Approval number: HSR003842)
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:	Not applicable
Reportable Quantities:	None.

15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information

Full text of R phrases in Section 3: Not applicable.

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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/NDSL = 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 Safely 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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