

SAFETY DATA SHEET

(according to (EC) 1907/2006)

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

1.1. Product identifier COTIN® C1707

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

Catalyst for urethane systems

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 Fax Number: 336-854-4058
E-Mail Address: msds@vertellus.com

Non-Emergency Phone Number: 336-292-1781

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	2
FLAMMABILITY	1
REACTIVITY	1

2.1. Classification of the substance or mixture

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

Environmental Chronic Category 2

Specific Target Organ Systemic Toxicity Repeated Exposure Category 2

Acute Toxicity Inhalation Vapour Category 3

Signal Word:

Danger

Hazard Precautions:

H411 - Toxic to aquatic life with long lasting effects.

H373 - May cause damage to organs through prolonged or repeated exposure.

H331 - Toxic if inhaled.

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2.2. Label elements

Hazard Symbols
(Pictogram):



Prevention Precautions:

- P273 - Avoid release to the environment.
- P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
- P271 - Use only outdoors or in a well-ventilated area.
- P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

First Aid Precautions:

- P391 - Collect spillage.
- P314 - Get medical advice/attention if you feel unwell.
- P321 - Specific treatment (see supplemental information on this label).
- P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage Precautions:

- P405 - Store locked up.
- P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

Disposal Precautions:

- P501 - Dispose of contents/container in accordance with local/regional/national/international regulation for hazardous wastes.

Single Exposure Target Organs:

Not applicable

Repeated Exposure Target Organs:

Not applicable

(According to Directive 67/548/EEC)

Symbol: N, Xn

Risk Phrases: R20: Harmful by inhalation.
R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases: S38: In case of insufficient ventilation, wear suitable respiratory equipment.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S60: This material and/or its container must be disposed of as hazardous waste.
S61: Avoid release to the environment. Refer to special instructions/safety data sheet.

2.3. Other hazards



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Signs and Symptoms of Potential Overexposure: See Section 11 for further toxicological information.
Primary Route(s) of Exposure: Inhalation. Ingestion. Eye contact. Skin contact. Skin absorption.
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
Tin, organic compound	PROPRIETARY	100	Not listed in EINECS	N, Xn, N*	R20- R48/22- R51/53- R48/25

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: Wash thoroughly after skin contact. The exposed area should be examined by medical personnel if irritation or pain persists after the area has been washed. May cause skin irritation. Remove contaminated clothing and continue flushing with water. Get medical attention if irritation develops or persists.

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

Inhalation: Remove from exposure. If not breathing, give artificial respiration and call a physician. Symptoms of pulmonary edema can be delayed up to 48 hours after exposure. 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. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. Irritating to the nose, throat, and respiratory tract. Immediately transport victim to an emergency care facility

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

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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: None Known

Potential for Dust Explosion: not available

Special Flammability Hazards: Not applicable.

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: 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. Do not allow the spilled product to enter public drainage system or open waterways. Dispose of the material in accordance with standard practice for disposal of potentially hazardous materials as required by applicable federal, state or local laws. 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.



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

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: Tin 0.1	ACGIH TLV:	Skin Tin; 0.1 STEL: Tin 0.2
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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



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Appearance, State & Odor (ambient temperature):	Amber liquid. Liquid Amber		
Molecular Formula:	Not available.	Molecular Weight:	
Vapor Pressure:	Not available.	Evaporation Rate:	Not available.
Specific Gravity or Density:	1.09	Vapor Density (air = 1):	Not available.
Boiling Point:	200 °C 392 °F	Freezing / Melting Point:	Not available.
Solubility in Water:	Not available.	Octanol / Water Coefficient:	Not available.
pH:	Not available.	Odor Threshold:	Not available.
Viscosity:	530 cps	Autoignition Temperature:	Not available.
Flash Point and Method:	Not available. (Not available.) (Not available.)	Flammable Limits:	Not available. (LEL) – Not available. (UEL)

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 LD50 (rat) 5000 mg/kg Oral LD50 (rat) 5000
Acute Dermal LD ₅₀ :	Not available.
Acute Inhalation LC ₅₀ :	Inhalation LC50 (4h) (rat) 5 mg/L LD50 (rat) 5
Skin Irritation:	No data available.
Skin Sensitization:	Not available.
Eye Irritation:	No data available.
Target Organs:	Not applicable
Carcinogenicity:	No data available.

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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
<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>	UN2788
<u>14.2. UN proper shipping name</u>	Organotin compounds, liquid, n.o.s. (organotin catalyst)
<u>14.3. Transport hazard class(es)</u>	6.1
<u>14.4. Packing group</u>	PG III
<u>14.5. Environmental hazards</u>	Marine Pollutant (Organotin compound, liquid)
<u>14.6. Special precautions for user</u>	Not available.
NA Emergency Guidebook Numbers: 153	IMDG EMS: S-A F-A

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

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SECTION 15: Regulatory information

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

OSHA Hazards:	Toxic. Not applicable.
WHMIS Classification:	Class D, Division 1, Subdivision B: Toxic Material. Class D, Division 2, Subdivision B: Toxic Material.
Chemical Inventory Lists:	Status
TSCA:	Listed
EINECS:	Not Listed
Canada(DSL/NDSL):	NDSL
Japan:	Listed
Korea:	PRESENT
Australia:	PRESENT
New Zealand:	Not Listed
China:	PRESENT
Philippines:	PRESENT
Switzerland:	Not Listed
New Zealand GHS Classification:	Non classificato da questo paese.
Japan GHS Classification:	Non classificato da questo paese.
Korea (MOL) GHS Classification:	Non classificato da questo paese.
Australia GHS Classification:	Non classificato da questo paese.
Taiwan GHS Classification:	Non classificato da questo paese.
Indonesia GHS Classification:	Non classificato da questo paese.
SARA 313:	15SARAH010 15SARAH020 15SARAH030

15.2. Chemical safety assessment

Not applicable.



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SECTION 16: Other information

Full text of R phrases in Section 3: R48/25: Toxic: danger of serious damage to health by prolonged exposure if swallowed.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R20: Harmful by inhalation.

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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