Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name
Universal Single-Ply Sealant

Trade Names
Part Number(s):310131, 342705

Synonyms
Sealants

Chemical Family
Sealants

Product Use
Sealants

Restrictions on Use
For industrial use only.

Manufacturer Information

Carlisle SynTec
1285 Ritner Highway
Carlisle, PA 17013
USA
Phone: +1-800-479-6832
Emergency Phone #: +1-800-424-9300 (CHEMTREC)

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

Physical Hazards	Not classified
Health Hazards	Skin sensitization – Category 1B Serious eye damage/irritation – Category 2A
Environmental Hazards	Not Classified

Specific Target Organ Toxicity - Repeated Exposure - Category 1 (lungs)

GHS Label Elements

Symbol(s)

Signal Word
Warning

Hazard Statement(s)
May cause an allergic skin reaction
Causes serious eye irritation

Precautionary Statement(s)

Prevention
Avoid breathing vapors
Contaminated work clothing must not be allowed out of the workplace
Wash hands thoroughly after handling
Wear protective gloves and eye protection
Wash contaminated clothing before reuse

Response
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice
If on skin: Wash with plenty of water and soap
If skin irritation or rash occurs: Get medical advice

Storage
None requires

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations

Contains
N-(3-(trimethoxysilyl)propyl)ethylenediamine, trimethoxyvinylsilane, dioctyltinbis(acetylacetonate).

Other Hazards
None known.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Substance either with health hazards present above their cut-off values/concentration limits or which may present a health risk below their applicable cut-off value:

CAS	Component Name	Percent
1760-24-3	N-(3-(trimethoxysilyl)propyl]ethylenediamine	< 3
2768-02-7	Trimethoxyvinylsilane	< 3
54068-28-9	Dioctyltinbis(acetylacetonate)	< 1

Section 4 - FIRST AID MEASURES

Description of Necessary First-Aid Measures

General advice
In all cases of doubt, or if symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation
If inhalation causes adverse effects, remove to fresh air.

Skin
Wash skin thoroughly with soap and water. Get medical advice if skin irritation or rash occurs.
In the event of any sensitization symptoms developing, ensure further exposure is avoided.

Eyes
Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical advice if eye irritation persists.

Ingestion
Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. DO NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

Indication of any immediate medical attention and special treatment needed
Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Most Important Symptoms/Effects

Inhalation
No specific symptoms known.

Ingestion
May cause discomfort if swallowed.

Skin contact
Allergic rash.

Eye contact
Causes serious eye irritation.

Note to Physicians
Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media
Water spray, fog or mist. Foam, carbon dioxide or dry powder.

Unsuitable Extinguishing Media
Do not use water jet as an extinguisher, as this will spread the fire.

Special Hazards Arising from the Substance or Mixture
Specific Hazard
Oxides of carbon. Oxides of nitrogen. No usual fire or explosion hazards noted.

Hazardous Combustion Products
Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Advice for firefighters
No specific firefighting precautions known.

Fire Fighting Measures
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures
Wear appropriate protective clothing. Avoid contact with eyes and skin.

Environmental Precautions
Do not discharge into drains or watercourses or onto the ground.

Methods and Materials for Containment and Cleaning Up
Collect and place in suitable waste disposal containers and seal securely. Clean any slippery coating that remains using a detergent/soap solution or other biodegradable cleaner.

Environmental Precautions
For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see section 13.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling
Avoid spilling. Avoid contact with skin and eyes. Persons susceptible to allergic reactions should not handle this product. Good personal hygiene procedures should be implemented.

Conditions for Safe Storage, Including any Incompatibilities
Technical measures and Storage Conditions
Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Requirements for Storage Areas
Store in original container.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Parameters

Occupational exposure limits:

Tin, organic compounds (as Sn):
OSHA PEL (8-hour TWA): 0.1 mg/m3
NIOSH REL (Up to 10-hour TWA): 0.1 mg/m3
ACGIH 2019 TLV (8-hour TWA): 0.1 mg/m3 ; ST (15-minute STEL): 0.2 mg/m3 (Skin – potential for cutaneous absorption)

Exposure Controls
Appropriate engineering controls: No specific ventilation requirements.

Personal Protective Equipment

Eye/face protection
Wear eye protection. Personal protective equipment for eye and face protection should comply with appropriate standards such as NIOSH (US) or EN 166 (EU).

Hand Protection
Use protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Protective gloves should comply with appropriate standards such as NIOSH (US) or EN 374 (EU).

Skin and Body Protection
Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene Measures
Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated.

Respiratory Protection
No specific recommendations.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Paste	**Color**	Dark Blue
Odor	Mild	**Odor Threshold**	Not available
pH	Not available	**Melting Point**	Not available
Initial Boiling Point and Range	Not available	**Flash Point**	Not available
Evaporation Rate	Not available	**Flammability**	Not available

Upper/lower Flammability or Explosive Limits	Not available	**Vapor Pressure**	Not available
Vapor Density	Not available	**Relative Density**	1.44 – 1.54 @ 20°C
Solubility(ies)	Insoluble in water	**Partition coefficient: n-octanol/water**	Not available
Auto-ignition Temperature	Not applicable	**Viscosity**	6,000 – 10,000 P @ 20°C
Explosive Properties	Not applicable	**VOC's**	< 10 grams/liter
Oxidising Properties	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidizing.		

Section 10 - STABILITY AND REACTIVITY

Reactivity
There are no known reactivity hazards associated with this product.

Chemical Stability
Stable at normal ambient temperatures and when used as recommended.

Possibility of Hazardous Reactions
Not known. Will not polymerise.

Conditions to Avoid
Avoid excessive heat for prolonged periods of team.

Incompatible Materials
No specific material or group of materials is likely to react with the product to produce a hazardous situation.

Hazardous decomposition products
Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen

Section 11 - TOXICOLOGICAL INFORMATION

Acute toxicity - oral: Not classified based on available information.
Trimethoxyvinylsilane: LD50 > 7120 mg/kg (rat, OECD 401).
N-(3-(trimethoxysilyl)propyl-ethylenediamine: LD50 > 2295 mg/kg (rat, EPA OPPTS 870.1100).

Acute toxicity – dermal: Not classified based on available information.
Trimethoxyvinylsilane: LD50 > 2000 mg/kg (rabbit, OECD 402).
N-(3-(trimethoxysilyl)propyl-

ethylenediamine:	LD50: 6899 mg/kg (rabbit, EPA OPPTS 870.1200).
Acute toxicity – inhalation:	Not classified based on available information.
Trimethoxyvinylsilane:	LC50: 16.8 mg/L (rat, vapor, 4 hours, OECD 403).
N-(3-(trimethoxysilyl)propyl-ethylenediamine:	LC50: 1.49 – 2.44 mg/L (rat, mist, 4 hours, OECD 403).
Skin corrosion/irritation:	Not classified based on available information.
Serious eye damage/irritation:	Classified as Eye Irritant Category 2A.
N-(3-(trimethoxysilyl)propyl-ethylenediamine:	Causes serious eye damage (rabbit, OECD 405).
Respiratory sensitization:	Not classified based on available information.
Skin sensitization:	Classified as Skin Sensitizer Category 1B.
Trimethoxyvinylsilane:	Sensitizing (Buehler test (OECD 406)).
N-(3-(trimethoxysilyl)propyl-ethylenediamine:	Sensitizing (Guinea pig maximisation test (OECD 406)).
Germ cell mutagenicity:	Not classified based on available information.
Carcinogenicity:	This product is not considered to be a carcinogen by IARC, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity: Not listed.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052): Not regulated.
U.S. National Toxicology Program (NTP) Report on Carcinogens: Not listed.

Reproductive toxicity:	Not classified based on available information.
Specific target organ toxicity – single exposure:	Not classified based on available information.
Specific target organ toxicity – repeated exposure:	Not classified based on available information.
Aspiration hazard:	Not relevant, due to the form of the product.

Information on Likely Routes of Exposure

Inhalation:	No specific health hazards known.
Ingestion:	May cause discomfort if swallowed.
Skin contact:	May cause sensitization by skin contact.
Eye contact:	Causes serious eye irritation.

Delayed and immediate effects: Causes serious eye irritation and may cause an allergic skin reaction.

Acute and chronic health hazards: Causes serious eye irritation and may cause an allergic skin Reaction.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity
There are no data available for the product. In cross-linked state, the product is not soluble in water and is easily separable from water by filtration.

Component Analysis - Aquatic Toxicity
Not classified based on available information.

Trimethoxyvinylsilane	2768-02-7
Fish:	LC50, 96 hours: 191 mg/l, Oncorhynchus mykiss
Invertebrates:	EC50, 48 hours: 168.7 mg/l, Daphnia magna
Plants:	EC50, 72 hours > 89 mg/l, Pseudokirchneriella subcapitata
N-(3-(trimethoxysilyl)propylethylenediamine	1760-24-3
Fish:	LC50, 96 hours: 597 mg/l, Brachydanio rerio (Zebra Fish)
Invertebrates:	EC50, 48 hours: 81 mg/l, Daphnia magna
Plants:	EC50, 96 hours: 8.8 mg/l, Pseudokirchneriella subcapitata

Persistence and Degradability
This product is not expected to be readily biodegradable.

Bioaccumulative Potential
Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

Mobility
The product is insoluble in water.

Results of PBT and vPvB Assessment
The product does not contain any substances classified as PBT or vPvB.

Other Adverse Effects
None known.

Section 13 - DISPOSAL CONSIDERATIONS

General Information
Waste is classified as hazardous waste. Dispose of contents/container in accordance with local, state and federal regulations.

Disposal Methods
Collect and place in suitable waste disposal containers and seal securely.

Section 14 - TRANSPORT INFORMATION

US DOT Information:
UN/NA #: Not regulated

IATA Information:
UN#: Not regulated

IMDG Information:
UN#: Not regulated

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
CERCLA Hazardous Substance List (40 CFR 302.4): Not listed.
SARA Section 302 Extremely hazardous substances (40 CFR 355): Not listed.
SARA Section 313 Toxic Release Inventory Chemicals (40 CFR 372.65): Not listed.
SARA Section 311/312 (40 CFR 370 Subparts B and C) hazard categories: Health hazards (skin sensitization and serious eye irritation); Physical hazards: No.

Other Federal Regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: Not listed.
Clean Air Act (CAA) Section 112(r) List of Substances for Accidental Release Prevention (40 CFR 68.130): Not listed.
Clean Water Act Toxic Pollutants List (40 CFR 401.15) and Priority Pollutants List (40 CFR 423 Appendix A): Not listed.

U.S. State Regulations
Massachusetts Right to Know Hazardous Substance List: Not listed.
New Jersey Right to Know Hazardous Substances List: Not listed.
Pennsylvania Right to Know Hazardous Substances List: Not listed.

US. California Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Toxic Substances Control Act
(TSCA) Inventory: One or more components of the product are either not listed or are exempt from listing on the inventory.

Section 16 - OTHER INFORMATION

Summary of Changes
Revision Date: March 31, 2023
Revision Note: General Update

Key / Legend
ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

Other Information

Disclaimer:
The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein

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