

Triangle Fastener Corporation

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APS 500 Advanced Polymer Sealant

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Brand Name: APS 500 Advanced Polymer Sealant Other Names/Synonyms: None Recommended Use: Sealant - Other Uses advised against: No information available

Company Contact Information

Emergency Telephone Number

CHEMTREC: 1-800-424-9300 (24 hours) or 1-703-527-3887

Triangle Fastener Corporation 1925 Preble Ave Pittsburgh, PA 15233 Telephone: 412-321-5000

2. HAZARDS IDENTIFICATION

GHS Classification



Classification: This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitization: Category 1

Serious eye damage/eye irritation: Category 2

Reproductive toxicity: Category 1B

Emergency Overview: Signal word - Danger

Hazard Statements: Causes serious eye irritation; May cause an allergic skin reaction; May damage fertility or the unborn child

Appearance: Varies

Physical State: Paste Liquid

Odor: Mint-like

Precautionary Statements - Prevention

Obtain special instructions before use; Do not handle until all safety precautions have been read and understood; Use personal protective equipment as required; Avoid breathing dust/fume/gas/mist/vapors/spray; Contaminated work clothing should not be allowed out of the

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workplace; Wear protective gloves; Wash face, hands and any exposed skin thoroughly after handling; Wear eye/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention; Specific treatment (see supplemental first aid instructions on this label)

<u>Skin</u>

IF ON SKIN: Wash with plenty of soap and water; If skin irritation or rash occurs: Get medical advice/attention; Take off contaminated clothing and wash before reuse

Eyes

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/attention

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician; Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

62.5% of the mixture consists of ingredient(s) of unknown toxicity

Other information

Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Harmful to aquatic life with long lasting effects.

Interactions with Other Chemicals

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance: Mixture Chemical Nature: MS

CAS Number	* <u>Wt %</u>	Component Name
1317-65-3	10 - 30	Limestone



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Proprietary	30 - 60	MS Polymers
2768-02-7	1 - 5	Silane, ethenyltrimethoxy-
471-34-1	15 - 40	Calcium Carbonate
1333-86-4	1 - 5	Carbon Black (if needed)
22673-19-4	0.1 -1	Tin catalyst
13463-67-7	1 - 5	Titanium Dioxide (if needed)

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

General Advice: Show this safety data sheet to the doctor in attendance.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.

Skin Contact

Wash with soap and water. May cause an allergic skin reaction. In case of skin irritation or allergic reaction see physician.

Inhalation

Remove to fresh air.

Ingestion

Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

Most important symptoms and effects, both acute and delayed

Burning sensation; Itching; Rashes; Hives

Indication of any immediate medical attention and special treatment needed

Notes to Physician

May cause sensitization of susceptible persons. Treat symptomatically



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5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

<u>Unsuitable extinguishing media</u> CAUTION: Use of water spray when fighting fire may be inefficient.

<u>Specific Hazards Arising from the Chemical</u> Product is or contains a sensitizer; May cause sensitization by skin contact

Uniform Fire Code

Sensitizer: Liquid

Hazardous Combustion Products

Carbon oxides

Explosion Data Sensitivity to Mechanical Impact: No

Sensitivity to Static Discharge: No

Protective equipment and precautions for firefighters

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

<u>Personal Precautions</u> Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Other Information

Refer to protective measures listed in Sections 7 and 8.

Environmental Precautions

<u>Environmental Precautions</u> Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up



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Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

<u>Handling</u>

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Incompatible Products

None known based on information supplied

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Supplier Trade Secret	-	TWA: 15 mg/m ³ TWA: 5 mg/m ³ (vacated) TWA: 15 mg/m ³ (vacated) TWA: 5 mg/m ³	TWA: 5 mg/m ³ respirable dust TWA: 10 mg/m ³ total dust
Supplier Trade Secret	-	TWA: 15 mg/m ³ TWA: 5 mg/m ³ (vacated) TWA: 15 mg/m ³ (vacated) TWA: 5 mg/m ³	TWA: 5 mg/m ³ respirable dust TWA: 10 mg/m ³ total dust
Supplier Trade Secret	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³
Supplier Trade Secret	TWA: 3 mg/m ³ inhalable fraction	TWA: 3.5 mg/m ³ (vacated) TWA: 3.5 mg/m ³	IDLH: 1750 mg/m ³ TWA: 3.5 mg/m ³ TWA: 0.1 mg/m ³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH



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Supplier Trade Secret	STEL: 0.2 mg/m ³ Sn TWA: 0.1 mg/m ³ Sn S*	TWA: 0.1 mg/m ³ Sn (vacated) TWA: 0.1 mg/m ³ Sn (vacated) S*	IDLH: 25 mg/m ³ Sn TWA: 0.1 mg/m ³ except Cyhexatin Sn
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ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992) See section 15 for national exposure control parameters

Appropriate engineering controls

Showers Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection

If splashes are likely to occur: Wear safety glasses with side shields (or goggles). None required for consumer use.

Skin and Body Protection

Wear protective gloves and protective clothing.

Respiratory Protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Wear suitable gloves and eye/face protection.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical Form: Paste, Liquid Color: Varies Odor: Mint-like Odor Threshold: No information available Appearance: Varies



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Property		Remarks Method
pH	UNKNOWN	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	No data available	None known
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability limit	No data available	
Lower flammability limit	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	No data available	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	
Other Information		
Softening Point	No data available	
VOC Content (g/L)	9	

No data available

No data available

10. STABILITY AND REACTITY

Particle Size

Reactivity

No data available.

Particle Size Distribution

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.



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Conditions to avoid Moisture.

Incompatible materials None known based on information supplied.

Hazardous Decomposition Products Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation:

Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

Eye Contact:

Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. Irritating to eyes. May cause redness, itching, and pain. May cause temporary eye irritation.

Skin Contact:

Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.

Ingestion:

Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Component Information

Chemical Name	emical Name Oral LD50 Dermal LD50		Inhalation LC50
Supplier Trade Secret	= 6450 mg/kg (Rat)	-	-
Supplier Trade Secret	> 10000 mg/kg (Rat)	-	-
Supplier Trade Secret	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	-

Information on toxicological effects



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Symptoms:

May cause redness and tearing of the eyes; Itching, Rashes, Hives.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization:

May cause sensitization by skin contact. May cause sensitization of susceptible persons.

Mutagenic Effects:

No information available.

Carcinogenicity:

The table below indicates whether each agency has listed any ingredient as a carcinogen. This product contains titanium dioxide which is classified as a possible carcinogen when present as respirable dust. This is not relevant for this product since it is a liquid. This product contains carbon black which is classified as a possible carcinogen when present as respirable dust. This is not relevant for this product since it is not in a respirable form.

Chemical Name	ACGIH	IARC	NTP	OSHA
Supplier Trade Secret	-	Group 2B	-	Х
Supplier Trade Secret	A3	Group 2B	-	х

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present

Reproductive Toxicity

Contains a known or suspected reproductive toxin.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Chronic Toxicity

No known effect based on information supplied. Contains a known or suspected reproductive toxin. Possible risk of irreversible effects.

Target Organ Effects



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Eyes. Skin. Respiratory system. Gastrointestinal tract (GI). Reproductive System. Lungs. Lymphatic System.

Aspiration Hazard

No information available.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) = 7,022.00 mg/kg ATEmix (inhalation-dust/mist) = 35.20 mg/L

12. ECOLOGICAL CONSIDERATIONS

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Supplier Trade Secret				24h EC50: > 5600 mg/L

Persistence and Degradability

No information available.

Bioaccumulation

No information available

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

Dispose of contents/containers in accordance with local regulations.

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This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical Name	California Hazardous Waste
Tin Catalyst (CAS# 22673-19-4)	Toxic

14. TRANSPORT INFORMATION

	NOT REGULATED per Shipping Name: ard Class:	Non Regulated N/A
TDG	Not regulated	
<u>MEX</u>	Not regulated	
<u>ICAO</u>	Not regulated	
	Not regulated per Shipping Name: ard Class:	Non Regulated N/A
IMDG/ Haz	IMO Not regulated ard Class:	N/A
<u>RID</u>	Not regulated	

- ADR Not regulated
- ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Not determined

DSL Not determined

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations



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SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard:	Yes
Chronic Health Hazard:	Yes
Fire Hazard:	No
Sudden release of pressure hazard:	No
Reactive Hazard:	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

None reportable

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Supplier Trade Secret	Х	Х	Х		
Supplier Trade Secret	Х	Х	Х		Х
Supplier Trade Secret	Х	Х	Х		
Supplier Trade Secret	Х	Х	Х		

U.S. State Right-to-Know Regulations

International Regulations

<u>Mexico</u>



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Component	Carcinogen Status	Exposure Limits
Supplier Trade Secret (1-5)		Mexico: TWA= 10 mg/m ³ Mexico: STEL= 20 mg/m ³
Supplier Trade Secret (0.1-1)		Mexico: TWA 0.1 mg/m ³ Mexico: STEL 0.2 mg/m ³
Supplier Trade Secret (1-5)		Mexico: TWA 3.5 mg/m ³ Mexico: STEL 7 mg/m ³
Supplier Trade Secret (15-45)		Mexico: TWA 10 mg/m ³ Mexico: STEL 20 mg/m ³
Supplier Trade Secret (10-30)		Mexico: TWA= 10 mg/m ³ Mexico: STEL= 20 mg/m ³

Mexico – Occupational Exposure Limits - Carcinogens

<u>Canada</u>

WHMIS Hazard Class D2A - Very toxic materials D2B - Toxic materials



16. OTHER INFORMATION

<u>NFPA</u>

2
0
0
-

<u>HMIS</u>

Health Hazards:	2*
Flammability:	0
Physical Hazard:	0
Personal Protection:	Х

Chronic Hazard Star Legend * = Chronic Health Hazard



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Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations. 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

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