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

Product Use: Sealant & Adhesive

Proper DOT Shipping: Caulking & Glaziers, NOI

DOT Hazard Classification: NONE

Molecular Formula: Mixture

NFPA Profile: Health 2 Flammability 1 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

Company Contact Information Emergency Telephone Number

Triangle Fastener Corporation 1925 Preble Ave.

Pittsburgh, PA. 15233

CHEMTREC: 800-424-9300 (24 hours)

Telephone: 866-512-4583

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Acute Effects

Eye: Direct contact may cause moderate irritation. Symptoms include stinging, tearing, redness,

and swelling of eyes.

Skin: May cause moderate irritation. Symptoms may include redness and burning of skin.

Inhalation: Irritates respiratory passages very slightly. Vapor overexposure may be harmful

and cause drowsiness.

Oral: Swallowing large amounts may cause drowsiness.

Prolonged/Repeated Exposure Effects

Skin: Repeated or prolonged contact may cause defatting and drying of skin which may result in

skin irritation and dermatitis. Overexposure by skin absorption may injure the following

organ(s): Liver.

Inhalation: Overexposure by inhalation may injure the following organ(s): Liver.

Oral: Overexposure by ingestion may injure the following organ(s): Liver.

Other Health Effects

This product contains a chemical(s) that has the following effect(s):

Carcinogenicity

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See Section 11 for specific details.

Signs and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure

Eye or skin disease.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number	<u>Wt %</u>	Component Name
1317-65-3	<50%	Calcium Carbonate
	<50%	Proprietary Polymers
13463-67-7	<10%	Titanium Dioxide

The above components are hazardous as defined in 29 CFR 1910.1200.

4. FIRST AID MEASURES

Eye: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 – 20

minutes while holding the eyelid(s) open. If contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Take care not to rinse contaminated water into the unaffected eye

or onto the face. Immediately obtain medical attention.

Skin: Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly

and gently blot or brush away excess chemical. Flush with lukewarm gently flowing water for 15 minutes. If irritation persists, repeat flushing. If irritation persists, obtain medical advice.

Inhalation: Material is not likely to present an inhalation hazard at ambient conditions. If material is heated

or vapor is generated, care should be taken to prevent inhalation. In case of exposure to

vapor, move to fresh air.

Oral: Never give anything by mouth if victim is rapidly losing consciousness or convulsing. DO NOT

INDUCE VOMITING. Have victim drink 2 to 8 oz. (60 to 240 mL) of water. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Have victim rinse mouth

with water again. Obtain medical attention.

Note to Physician: Treat according to person's condition and specifics of exposure.

5. FIRE FIGHTING MEASURES

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Flash Point: > 212F/100C (Closed Cup)

Autoignition Temperature: Not determined.

Flammability Limits in Air: Not determined.

Extinguishing Media: On large fires use fog, foam or water spray. On small fires use carbon dioxide (CO2), dry

chemical or foam. Water can be used to cool fire exposed containers.

Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large

fires involving chemicals. Determine the need to evacuate or isolate the area according to

your local emergency plan. Use water spray to keep fire exposed containers cool.

Unusual Fire Hazards: None.

6. ACCIDENTAL RELEASE MEASURES

Containment/Clean up: Ventilate area. Observe all personal protection equipment recommendations described in

Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this

MSDS provide information regarding certain federal and state requirements.

Note: See Section 8 for Personal Protective Equipment for Spills.

7. HANDLING AND STORAGE

Use with adequate ventilation to keep area below established exposure levels. Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally.

Use reasonable care and store away from acidic and oxidizing materials. Keep container closed and store away from water or moisture.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Component Exposure Limits

CAS Number Component Name Exposure Limits

1317-65-3 Calcium Carbonate OSHA PEL 15 mg/m³, ACGIH TLV 10 mg/m³

13463-67-7 Titanium Dioxide OSHA PEL 15 mg/m³, ACGIH TLV 10 mg/m³

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Exposure limits are provided for information only. These chemicals are not in a respirable form in this product.

Engineering Controls

Local Ventilation: Recommended.

General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as

soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are

recommended.

Suitable Gloves: Avoid skin contact by implementing good industrial hygiene practices and procedures. Select

and use gloves and/or protective clothing to further minimize the potential for skin contact. Consult with your glove and/or personnel protective equipment manufacturer for selection of

appropriate compatible materials.

Inhalation: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure

assessment demonstrates that exposures are within recommended exposure guidelines. IH

personnel can assist in judging the adequacy of existing engineering controls.

Suitable Respirator: Respiratory protection is not needed under ambient conditions. If vapor is generated when

material is heated or handled, the following is advised. General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA

worth. Follow Contractespirator regulations (29 CFR 1910.154) and use NICOTI/NIOTI

approved respirators.

Personal Protective Equipment for Spills

Eyes: Use full face respirator.

Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as

soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are

recommended.

Inhalation/Suitable Respiratory protection recommended. Follow OSHA Respirator Regulations

Respirator: (29 CFR 1910.134) and use NIOSH/MHSA approved respirators. Protection provided by air

purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide

adequate protection.

Precautionary Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not

Measures: take internally. Use reasonable care.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

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9. PHYSICAL & CHEMICAL PROPERTIES

Physical Form: Paste

Color: N/A Odor: Mlld

Specific Gravity @ 25°C: ~1.35 – 1.45

Viscosity: Not determined.

Freezing/Melting Point: Not determined.

Boiling Point: Not determined.

Vapor Pressure @ 25°C: Not determined.

Vapor Density: Not determined. Solubility in Water: Slightly soluble

pH: Not determined.

Volatile Content: 9 g/L (0.14%)

Flash Point: > 212F/100C (Closed Cup)

Autoignition Temperature: Not determined. Flammability Limits in Air: Not determined.

Note: The above information is not intended for use in preparing product specifications.

10. STABILITY AND REACTITY

Chemical Stability: Stable.

Hazardous Polymerization: Hazardous polymerization will not occur.

Conditions to Avoid: Avoid temperatures above 120 °F.

Materials to Avoid: Acidic and oxidizing material can cause a reaction.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde. Metal oxides. Nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Component Toxicology Information

For Product

Not Established

For Titanium Dioxide

Trochimowicz, et al.c J. Appl. Tox., 8, 383-385 (1988)

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Oral LD (rat) >25g/kg Dermal LD (rabbit) >10 g/kg Inhalation LC (rat) >6.82 mg/l (4 hr)

Special Hazard Information on Components

None

12. ECOLOGICAL CONSIDERATIONS

Environmental Fate and Distribution

Complete information is not yet available.

Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

Ecotoxicity Classification Criteria

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <=2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

13. DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No

State or local laws may impose additional regulatory requirements regarding disposal.

14. TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)

Not subject to DOT.

Ocean Shipment (IMDG)

Not subject to IMDG code.

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Air Shipment (IATA)

Not subject to IATA regulations.

15. REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

This material is considered hazardous.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA

Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances (40 CFR 355):

None.

Section 304 CERCLA Hazardous Substances (40 CFR 302):

None.

Section 311/312 Hazard Class (40 CFR 370):

Acute: Yes
Chronic: No
Fire: No
Pressure: No
Reactive: No

Section 313 Toxic Chemicals (40 CFR 372):

None present or none present in regulated quantities.

Note: Chemicals are listed under the 313 Toxic Chemicals section only if they meet or exceed a reporting threshold.

Work Place Hazardous Material Information Sysytems (CRP Section 33)

This product has been classified according to the hazard criteria of the Controlled Products Regulation and the MSDS contains all required information.

3 Controlled Product: Classification: D2B

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Supplemental State Compliance Information

California

Warning: This product contains the following chemical chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

Crystalline Silica.

Massachusetts

	CAS Number	Wt %	Component Name	
	13463-67-7	<10%	Titanium Dioxide	
Minnesota				
	CAS Number	<u>Wt %</u>	Component Name	
	13463-67-7	<10%	Titanium Dioxide	
New Jersey				
	CAS Number	Wt %	Component Name	
	13463-67-7	<10%	Titanium Dioxide (SN 1861)	
Pennsylvania				
	CAS Number	Wt %	Component Name	
	13463-67-7	<10%	Titanium Dioxide	
Rhode Island				
	CAS Number	Wt %	Component Name	
	13463-67-7	<10%	Titanium Dioxide	

16. OTHER INFORMATION

Prepared by: Triangle Fastener Corporation

The opinions expressed herein are those of qualified experts within Triangle Fastener Corporation. These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. Since the use of the

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product is not within the control of Triangle Fastener Corporation, each user should review these r specific context of the intended use and determine whether they are appropriate.	recommendations in the