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Material Safety Data Sheet

CHEMTREC Transportation Emergency Phone: 800-424-9300

Pittsburgh Poison Control Center Health Emergency No.: 412-681-6669

NOTE: The CHEMTREC Transportation Emergency Phone is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals

1. Identification

Product Name: TAMMSFLEX NS PART A Revision Date: 4/11/2013

Identification Number: 166PA1NL Supercedes Date: 12/30/2008

Product Use/Class: FOR INDUSTRIAL USE ONLY

Manufacturer: Carboline Company Preparer: Regulatory Department

2150 Schuetz Road St. Louis, MO 63146

800-848-4645

2. Hazard Identification

EMERGENCY OVERVIEW: This product may contain Titanium Dioxide, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. This classification is relevant when exposed to titanium dioxide in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. May cause respiratory tract irritation. May be harmful if swallowed. Irritating to eyes and skin.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: May cause eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May cause skin irritation.

EFFECTS OF OVEREXPOSURE - INHALATION: May cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: May be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Chronic exposure may cause dermatitis. Prolonged or repeated

inhalation may cause damage to the lungs.

MEDICAL CONDITIONS PRONE TO AGGRAVATION: No Information

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Skin Contact

3. Composition/Information On Ingredients

Hazardous Ingredients

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
CALCIUM CARBONATE	471-34-1	30.0	N/E	N/E	5 MGM3	N/E
TITANIUM DIOXIDE	13463-67-7	15.0	10 MGM3	N/E	10 MGM3	N/E
ALUMINUM SILICATE	1332-58-7	10.0	2 MGM3	N/E	5 MGM3	N/E

4. First-aid Measures

AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician.

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AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

5. Fire-fighting Measures

Flash Point, °F: 200F (93C) Lower Explosive Limit, %: N/A (Pensky-Martens Closed Cup) Upper Explosive Limit, %: N/A

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

SPECIAL FIREFIGHTING PROCEDURES: Evacuate personnel to safe areas. Use NIOSH approved respiratory protection. Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus.

6. Accidental Release Measures

PERSONAL SAFETY MEASURES/ENVIRONMENTAL MEASURES/METHOD OF CLEANING/CONTAINMENT: Evacuate personnel to safe areas. Wear personal protective equipment. For personal protection see section 8. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Avoid contact with skin and eyes. Do not allow material to contaminate ground water system. Prevent product from entering drains.

7. Handling and Storage

INSTRUCTIONS FOR SAFE HANDLING: Do not breathe vapours or spray mist. Do not get in eyes, on skin, or on clothing. Keep containers dry and tightly closed to avoid moisture absorption and contamination. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Prepare the working solution as given on the label(s) and/or the user instructions.

STORAGE CONDITIONS: Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

RESPIRATORY PROTECTION: Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required.

SKIN PROTECTION: Lightweight protective clothing Impervious gloves Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Request information on glove permeation properties from the glove supplier.

EYE PROTECTION: Safety glasses with side-shields

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

PROTECTION AND HYGIENE MEASURES: Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

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9. Physical and Chemical Properties

Boiling Range:N/A - N/AVapor Density:N/AOdor:MercaptanOdor Threshold:N/D

Appearance: White Paste Evaporation Rate: Slower Than Ether

Solubility in Water: N/D Specific Gravity: 1.57

Freeze Point: N/D pH: N/D

Physical State: Liquid Vapor Pressure: No Information

(See section 16 for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Direct sources of heat.

MATERIALS TO AVOID: Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense

black smoke.

HAZARDOUS POLYMERIZATION: Hazardous polymerisation does not occur.

STABILITY: Stable under normal conditions.

11. Toxicological Information

Chemical Name	CAS-No.	LD50	LC50
CALCIUM CARBONATE	471-34-1	6450 mg/kg, oral, rat	Not Available
TITANIUM DIOXIDE	13463-67-7	25000 mg/m3, oral (rat)	6.82 mg/L, Inh, rat 4H
ALUMINUM SILICATE	1332-58-7	Not Available	Not Available

12. Ecological Information

ECOLOGICAL INFORMATION: No information available.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of in accordance with local regulations.

14. Transport Information

DOT Proper Shipping Name:Not RegulatedPacking Group:N/ADOT Technical Name:N/AHazard Subclass:N/ADOT Hazard Class:NoneResp. Guide Page:N/A

DOT UN/NA Number: None

Additional Notes: No Information

15. Regulatory Information

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U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. State Regulations:

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u> <u>CAS-No.</u>

POLYSULFIDE RESIN TRADE SECRET

Pennsylvania Right-To-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

<u>Chemical Name</u> <u>CAS-No.</u>

POLYSULFIDE RESIN TRADE SECRET

CALIFORNIA PROPOSITION 65:

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

Chemical NameCAS-No.TITANIUM DIOXIDE13463-67-7

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations:

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Canadian WHMIS Class: D2A, D2B

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16. Other Information

HMIS Ratings:

Health: 0 Flammability: 1 Reactivity: 0 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, GR/LTR MIXED (UNTHINNED): 0

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

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 use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.