



## Safety Data Sheet

Prepared in Accordance with HCS 29  
C.F.R. 1910.1200

### 1. Identification of the Substance/Mixture and the Company/Undertaking

- 1.1 Product Identifier** 166PB1NL
- Product Name:** TAMMSFLEX NS PART B **Revision Date:** 10/10/2018
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Component of multicomponent industrial coatings - Industrial use. **Supersedes Date:** New SDS
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** Carboline Company  
2150 Schuetz Road  
St. Louis, MO USA 63146
- Regulatory / Technical Information:  
Contact Carboline Technical Services at  
1-800-848-4645
- Datasheet Produced by:** Alotta, Vicki - ehs@stoncor.com
- 1.4 Emergency telephone number:** CHEMTREC 1-800-424-9300 (Inside US)  
CHEMTREC +1 703 5273887 (Outside US)  
HEALTH - Pittsburgh Poison Control 1-412-681-6669

### 2. Hazard Identification

**2.1 Classification of the substance or mixture**

Acute Toxicity, Inhalation, category 4

**2.2 Label elements**

**Symbol(s) of Product**



**Signal Word**

warning

**Named Chemicals on Label**

MANGANESE OXIDE

**HAZARD STATEMENTS**

Acute Toxicity, Inhalation, category 4

H332

Harmful if inhaled.

**PRECAUTION PHRASES**P261  
P304+340Avoid breathing dust/fume/gas/mist/vapours/spray.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.**2.3 Other hazards**

No Information

**Results of PBT and vPvB assessment:**

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

**3. Composition/Information On Ingredients****3.2 Mixtures****Hazardous Ingredients**

| <u>CAS-No.</u> | <u>Chemical Name</u>         | <u>%</u> |
|----------------|------------------------------|----------|
| 1313-13-9      | MANGANESE OXIDE              | 50-75    |
| 137-26-8       | TETRAMETHYLTHIURAM DISULFIDE | 2.5-10   |

| <u>CAS-No.</u> | <u>GHS Symbols</u> | <u>GHS Hazard Statements</u> | <u>M-Factors</u> |
|----------------|--------------------|------------------------------|------------------|
| 1313-13-9      | GHS07              | H332                         | 0                |
| 137-26-8       | GHS07              | H302                         | 0                |

**Additional Information:** The text for GHS Hazard Statements shown above (if any) is given in Section 16.

**4. First-aid Measures****4.1 Description of First Aid Measures**

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

**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. Wash contaminated clothing before reuse.

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

**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.

**4.2 Most important symptoms and effects, both acute and delayed**

May be harmful if swallowed.

**4.3 Indication of any immediate medical attention and special treatment needed**

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

When symptoms persist or in all cases of doubt seek medical advice.

**5. Fire-fighting Measures****5.1 Extinguishing Media:**

Carbon Dioxide, Dry Chemical, Foam, Water Fog

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None known.

**5.2 Special hazards arising from the substance or mixture**

No Information

**5.3 Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus. Evacuate personnel to safe areas. Use NIOSH approved

respiratory protection. Use water spray to cool unopened containers.

## 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. For personal protection see section 8.

### 6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

### 6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. 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).

### 6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

## 7. Handling and Storage

### 7.1 Precautions for safe handling

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

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

### 7.2 Conditions for safe storage, including any incompatibilities

**CONDITIONS TO AVOID:** Heat, flames and sparks.

**STORAGE CONDITIONS:** Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

### 7.3 Specific end use(s)

No specific advice for end use available.

## 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Ingredients with Occupational Exposure Limits (US)

| <u>Name</u>                  | <u>CAS-No.</u> | <u>ACGIH TWA</u> | <u>ACGIH STEL</u> | <u>ACGIH Ceiling</u> |
|------------------------------|----------------|------------------|-------------------|----------------------|
| MANGANESE OXIDE              | 1313-13-9      | N/E              | N/E               | N/E                  |
| TETRAMETHYLTHIURAM DISULFIDE | 137-26-8       | N/E              | N/E               | N/E                  |

| <u>Name</u>                  | <u>CAS-No.</u> | <u>OSHA PEL</u> | <u>OSHA STEL</u> |
|------------------------------|----------------|-----------------|------------------|
| MANGANESE OXIDE              | 1313-13-9      | 5.0 MG/M3       | N/E              |
| TETRAMETHYLTHIURAM DISULFIDE | 137-26-8       | N/E             |                  |

**FURTHER INFORMATION:** Refer to the regulatory exposure limits for the workforce enforced in each country.

## 8.2 Exposure controls

### Personal Protection

**RESPIRATORY PROTECTION:** In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. 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.

**EYE PROTECTION:** Ensure that eyewash stations and safety showers are close to the workstation location. Safety glasses with side-shields.

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

**OTHER PROTECTIVE EQUIPMENT:** No Information

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

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

|   |                   |
|---|-------------------|
| <b>Appearance:</b>                                  | Amber Liquid      |
| <b>Physical State</b>                               | Liquid            |
| <b>Odor</b>   | Ammoniacal        |
| <b>Odor threshold</b>                               | N/D               |
| <b>pH</b>   | N/D               |
| <b>Melting point / freezing point (°C)</b>          | N/D               |
| <b>Boiling point/range</b>                          | N/E - N/E         |
| <b>Flash Point</b>                                  | >200F (93C)       |
| <b>Evaporation rate</b>                             | Slower Than Ether |
| <b>Flammability (solid, gas)</b>                    | N/D               |
| <b>Upper/lower flammability or explosive limits</b> | N/A - N/A         |
| <b>Vapour Pressure, mmHg</b>                        | N/D               |
| <b>Vapour density</b>                               | Heavier than Air  |
| <b>Relative density</b>                             | N/D               |
| <b>Solubility in / Miscibility with water</b>       | N/D               |
| <b>Partition coefficient: n-octanol/water</b>       | N/D               |
| <b>Auto-ignition temperature (°C)</b>               | N/D               |
| <b>Decomposition temperature (°C)</b>               | N/D               |
| <b>Viscosity</b>                                    | No Information    |
| <b>Explosive properties</b>                         | N/D               |
| <b>Oxidising properties</b>                         | N/D               |

**9.2 Other information**

|                                       |      |
|---------------------------------------|------|
| VOC Content g/l:                      | 0    |
| Specific Gravity (g/cm <sup>3</sup> ) | 1.76 |

## 10. Stability and Reactivity

**10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions.

**10.2 Chemical stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Hazardous polymerisation does not occur.

**10.4 Conditions to avoid**

Heat, flames and sparks.

**10.5 Incompatible materials**

Strong oxidizing agents.

**10.6 Hazardous decomposition products**

Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.

## 11. Toxicological Information

**11.1 Information on toxicological effects****Acute Toxicity:**

Oral LD50: N/D

Inhalation LC50: N/D

Irritation: No Information

Corrosivity: No Information

Sensitization: No Information

Repeated dose toxicity: No Information

Carcinogenicity: No Information

Mutagenicity: No Information

Toxicity for reproduction: No Information

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

| <u>CAS-No.</u> | <u>Chemical Name</u> | <u>Oral LD50</u>         | <u>Dermal LD50</u> | <u>Vapor LC50</u> | <u>Gas LC50</u> | <u>Dust/Mist LC50</u> |
|----------------|----------------------|--------------------------|--------------------|-------------------|-----------------|-----------------------|
| 1313-13-9      | MANGANESE OXIDE      | 3478 mg/kg,<br>oral, rat |                    | Not Available     | 0.000           | 0.000                 |

|          |                                 |                               |   |
|----------|---------------------------------|-------------------------------|---|
| 137-26-8 | TETRAMETHYLTHIURAM<br>DISULFIDE | 1250 MG/KG,<br>ORAL,<br>MOUSE | 500 MG/M3/<br>4 HR<br>INHALATION<br>, RAT |
|----------|---------------------------------|-------------------------------|---|

**Additional Information:**

No Information

**12. Ecological Information****12.1 Toxicity:**

|                      |                |
|----------------------|----------------|
| EC50 48hr (Daphnia): | No Information |
| IC50 72hr (Algae):   | No Information |
| LC50 96hr (fish):    | No Information |

**12.2 Persistence and degradability:** No Information

**12.3 Bioaccumulative potential:** No Information

**12.4 Mobility in soil:** No Information

**12.5 Results of PBT and vPvB assessment:** The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

**12.6 Other adverse effects:** No Information

| <u>CAS-No.</u> | <u>Chemical Name</u>         | <u>EC50 48hr</u> | <u>IC50 72hr</u> | <u>LC50 96hr</u> |
|----------------|------------------------------|------------------|------------------|------------------|
| 1313-13-9      | MANGANESE OXIDE              | No information   | No information   | No information   |
| 137-26-8       | TETRAMETHYLTHIURAM DISULFIDE |                  |                  |                  |

**13. Disposal Considerations**

**13.1 WASTE TREATMENT METHODS:** Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**14. Transport Information**

|  |                |
|--|----------------|
| <b>14.1 UN number</b>  | None           |
| <b>14.2 UN proper shipping name</b>  | Not Regulated  |
| <b>Technical name</b>  | N/A            |
| <b>14.3 Transport hazard class(es)</b>   | None           |
| <b>Subsidiary shipping hazard</b>  | No Information |
| <b>14.4 Packing group</b>  | N/A            |
| <b>14.5 Environmental hazards</b>  | No Information |
| <b>14.6 Special precautions for user</b>   | No Information |
| <b>EmS-No.:</b>  | No Information |
| <b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code</b> | No Information |

**15. Regulatory Information**

**15.1 Safety, health and environmental regulations/legislation for the substance or mixture:****U.S. Federal Regulations: As follows -****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:

Acute Toxicity (any route of exposure)

**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:

| <u>Chemical Name</u>         | <u>CAS-No.</u> |
|------------------------------|----------------|
| MANGANESE OXIDE              | 1313-13-9      |
| TETRAMETHYLTHIURAM DISULFIDE | 137-26-8       |

**Toxic Substances Control Act:**

All components of this product are either listed on the TSCA Inventory or are exempt.

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: As follows -****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> |
|----------------------|----------------|
| CURING AGENT         | 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> |
|----------------------|----------------|
| CURING AGENT         | TRADE SECRET   |

**CALIFORNIA PROPOSITION 65**

WARNING: Cancer and Reproductive Harm -- [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**International Regulations: As follows -****\* Canadian DSL:**

No Information

**15.2 Chemical Safety Assessment:**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**16. Other Information**

**Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

|      |                       |
|------|-----------------------|
| H302 | Harmful if swallowed. |
| H332 | Harmful if inhaled.   |

**Reasons for revision**

No Information

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.