



## Safety Data Sheet

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

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

<b>1.1 Product Identifier</b>	1403B1NL	<b>Revision Date:</b>	04/04/2025
<b>Product Name:</b>	PHENOLINE TANK SHIELD FP PART B	<b>Supersedes Date:</b>	06/09/2023
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	Component of multicomponent industrial coatings - Industrial use.		
<b>1.3 Details of the supplier of the safety data sheet</b>	<p><b>Manufacturer:</b> Carboline Global Inc. 2150 Schuetz Road St. Louis, MO USA 63146</p> <p>Regulatory / Technical Information: Contact Carboline Technical Services at 1-800-848-4645</p> <p><b>Datasheet Produced by:</b> Schlereth, Ken - regulatory@carboline.com</p>		
<b>1.4 Emergency telephone number:</b>	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  
 Acute Toxicity, Oral, category 4  
 Hazardous to the aquatic environment, Chronic, category 3  
 Carcinogenicity, category 1A  
 Skin Corrosion, category 1  
 Skin Sensitizer, category 1  
 STOT, repeated exposure, category 1

## 2.2 Label elements

### Symbol(s) of Product



### Signal Word

Danger

### Named Chemicals on Label

TRIS-2,4,6- (DIMETHYLAMINOMETHYL)PHENOL, BENZYL ALCOHOL, 3-AMINOPROPYLTRIETHOXYSILANE, ISOPHORONEDIAMINE, MICROCRYSTALLINE SILICA, ORANOSILANE ESTER, CYCLOALIPHATIC AMINE

### HAZARD STATEMENTS

Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
Carcinogenicity, category 1A	H350-1A	May cause cancer.
STOT, repeated exposure, category 1	H372	Causes damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful to aquatic life with long lasting effects.

### PRECAUTION PHRASES

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P308+313	IF exposed or concerned: Get medical advice/attention
P314	Get medical advice/attention if you feel unwell.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.

## 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>Name According to EEC</u>	<u>EINEC No.</u>	<u>CAS-No.</u>	<u>%</u>	<u>Classifications</u>	
BENZYL ALCOHOL	202-859-9	100-51-6	10 - <25	H302-317-319-332	Acute Tox. 4 Inhalation, Acute Tox. 4 Oral, Eye Irrit. 2, Skin Sens. 1
CYCLOALIPHATIC AMINE	614-657-1	68609-08-5	10 - <25	H302-314-317-411	Acute Tox. 4 Oral, Aquatic Chronic 2, Skin Corr. 1, Skin Sens. 1
ISOPHORONEDIAMINE	220-666-8	2855-13-2	10 - <25	H302-312-314-317-412	Acute Tox. 4 Dermal, Acute Tox. 4 Oral, Aquatic Chronic 3, Skin Corr. 1, Skin Sens. 1A
MICROCRYSTALLINE SILICA	238-878-4	14808-60-7	10 - <25	H350-372	Carc. 1A, STOT RE 1
TITANIUM DIOXIDE	236-675-5	13463-67-7	10 - <25		
3-AMINOPROPYLTRIEETHOXYSILANE	213-048-4	919-30-2	1.0 - <2.5	H302-314	Acute Tox. 4 Oral, Skin Corr. 1
ORANOSILANE ESTER	213-048-4	919-30-2	1.0 - <2.5	H302-314	
ALIPHATIC HYDROCARBON	265-191-7	64742-88-7	1.0 - <2.5	H304	
TRIS-2,4,6-(DIMETHYLAMINOMETHYL)PHENOL	202-013-9	90-72-2	1.0 - <2.5	H302-315-319	Acute Tox. 4 Oral, Eye Irrit. 2, Skin Irrit. 2
TOLUENE	203-625-9	108-88-3	0.1 - <1.0	H225-304-315-336-361d-370-373	Asp. Tox. 1, Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT RE 2, STOT SE 1, STOT SE 3 NE

##### CAS-No.

##### M-Factors

100-51-6  
68609-08-5  
2855-13-2  
14808-60-7  
13463-67-7  
919-30-2  
919-30-2  
64742-88-7  
90-72-2  
108-88-3

Remarks: CAS No 13463-67-7: Note 10

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.

**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

Irritating to eyes and skin. 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:** Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Vapors may spread long distances and ignite.

**FOR SAFETY REASONS NOT TO BE USED:** Do not use a solid water stream as it may scatter and spread fire.

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

No Information

### 5.3 Advice for firefighters

**SPECIAL FIREFIGHTING PROCEDURES:** 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.

**SPECIAL FIREFIGHTING PROTECTION EQUIPMENT:** No Information

## 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

No 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)**

The mixing and application to be in accordance with the technical data sheets.

**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>
BENZYL ALCOHOL	100-51-6	N/E	N/E	N/E
CYCLOALIPHATIC AMINE	68609-08-5	N/E	N/E	N/E
ISOPHORONEDIAMINE	2855-13-2	N/E	N/E	N/E
MICROCRYSTALLINE SILICA	14808-60-7	0.025 MGM3	N/E	N/E
TITANIUM DIOXIDE	13463-67-7	10 mg/m3	N/E	N/E
3-AMINOPROPYLTRIEHOXYSILANE	919-30-2	N/E	N/E	N/E
ORANOSILANE ESTER	919-30-2	NE	NE	N/E
ALIPHATIC HYDROCARBON	64742-88-7	N/E	N/E	N/E
TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	90-72-2	N/E	N/E	N/E
TOLUENE	108-88-3	20 PPM	N/E	N/E

<u>Name</u>	<u>CAS-No.</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>
BENZYL ALCOHOL	100-51-6	N/E	N/E
CYCLOALIPHATIC AMINE	68609-08-5		N/E
ISOPHORONEDIAMINE	2855-13-2	N/E	N/E
MICROCRYSTALLINE SILICA	14808-60-7	0.05 MGM3	N/E
TITANIUM DIOXIDE	13463-67-7	15 MGM3	N/E
3-AMINOPROPYLTRIEHOXYSILANE	919-30-2	N/E	N/E
ORANOSILANE ESTER	919-30-2	NE	N/E
ALIPHATIC HYDROCARBON	64742-88-7	N/E	N/E
TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	90-72-2	N/E	N/E
TOLUENE	108-88-3	200 ppm	560 MGM3, 150 PPM

**FURTHER ADVICE:** Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

**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.

**BODY PROTECTION:** Lightweight protective clothing

**OTHER PROTECTIVE EQUIPMENT:** No Information

**ENGINEERING CONTROLS:** Avoid contact with skin, eyes and clothing. Use only in an area equipped with explosion proof exhaust ventilation. Ensure adequate ventilation, especially in confined areas.

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

<b>Appearance:</b>	White Viscous Liquid
<b>Physical State</b>	Unknown
<b>Odor</b>	Ammoniacal
<b>Odor threshold</b>	Not Determined
<b>pH</b>	Not Determined
<b>Melting point / freezing point (°C)</b>	Not Determined
<b>Boiling point/range (°C)</b>	173 F (78 C) - 572 F (300 C)
<b>Flash Point (°C)</b>	205°F (96°C)
<b>Evaporation rate</b>	Slower Than Ether
<b>Flammability (solid, gas)</b>	N/D
<b>Upper/lower flammability or explosive limits</b>	0.9 - 19.0
<b>Vapour Pressure, mmHg</b>	Not Determined
<b>Vapour density</b>	Heavier than Air
<b>Relative density</b>	N/D
<b>Solubility in / Miscibility with water</b>	Not Determined
<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>	Not Determined
<b>Explosive properties</b>	N/D
<b>Oxidising properties</b>	N/D

### 9.2 Other information

<b>VOC Content g/l:</b>	5
<b>Specific Gravity (g/cm<sup>3</sup>)</b>	1.609

## 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: Unknown

Corrosivity: Skin Corrosion, category 1

Sensitization: Skin Sensitizer, category 1

Repeated dose toxicity: Unknown

Carcinogenicity: Carcinogenicity, category 1A

Mutagenicity: Unknown

Toxicity for reproduction: Unknown

STOT-single exposure: Unknown

STOT-repeated exposure: STOT, repeated exposure, category 1

Aspiration hazard: Unknown

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>
100-51-6	BENZYL ALCOHOL	1230 mg/kg rat, oral	2001 mg/kg, dermal, rabbit	4176 mg/l / 4h, Inh, Rat	No Information	No Information
68609-08-5	CYCLOALIPHATIC AMINE	500 mg/kg oral, rat		Not Available	0.000	0.000
2855-13-2	ISOPHORONEDIAMINE	500 mg/kg oral	No Information	No Information	No Information	No Information
14808-60-7	MICROCRYSTALLINE SILICA	22500 mg/kg	No Information	No Informaiton	No Information	No Information
13463-67-7	TITANIUM DIOXIDE	25000 mg/kg, oral (rat)	No Information	No Information	No Information	No Information
919-30-2	3- AMINOPROPYLTRIETHOXYSI LANE	1505 mg/kg, oral, rat	4117 mg/kg, dermal	Not Available	0.000	0.000

919-30-2	ORANOSILANE ESTER	1780 MG/KG, ORAL, RAT		NOT AVAILABLE	No Information	No Information
64742-88-7	ALIPHATIC HYDROCARBON	>2000 mg/kg, oral, rat	Not Available	>700 ppm/4 hrs (rat)	0.000	0.000
90-72-2	TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	1999 mg/kg (rat)	No Information	No Information	No Information	No Information
108-88-3	TOLUENE	5000 mg/kg rat oral	12267 mg/kg, dermal, rabbit	8000 ppm/4 hrs, rat, inhalation	No Information	No Information

**Additional Information:**

Constituents of this product may include crystalline silica which, if inhalable, may cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group 1 carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. This classification is relevant when exposed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. Constituents may also include asbestiform or non-asbestiform tremolite or other silicates as impurities, and above dei minimus exposure to these impurities in inhalable form may be carcinogenic or cause other serious lung problems.

## 12. Ecological Information

**12.1 Toxicity:**

<b>EC50 48hr (Daphnia):</b>	Unknown
<b>IC50 72hr (Algae):</b>	Unknown
<b>LC50 96hr (fish):</b>	Unknown

**12.2 Persistence and degradability:** Unknown

**12.3 Bioaccumulative potential:** Unknown

**12.4 Mobility in soil:** Unknown

**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:** Unknown

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
100-51-6	BENZYL ALCOHOL	230 mg/l (Daphnia)	700 mg/l (Algae)	10 mg/l (Fish)
68609-08-5	CYCLOALIPHATIC AMINE	No information	No information	No information
2855-13-2	ISOPHORONEDIAMINE	No information	No information	No information
14808-60-7	MICROCRYSTALLINE SILICA	No information	No information	No information
13463-67-7	TITANIUM DIOXIDE	No information	No information	No information
919-30-2	3-AMINOPROPYLTRIEHOXYSILANE	331 mg/l (daphnia)	1000 mg/l (algae)	935 mg/l (Zebra Fish)
919-30-2	ORANOSILANE ESTER	No information	No information	No information
64742-88-7	ALIPHATIC HYDROCARBON	No information	No information	No information
90-72-2	TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	No information	84 mg/l (Algae)	175 mg/l (Fish)
108-88-3	TOLUENE	6 mg/l (Daphnia magna)	12.5 mg/L (Algae)	5.8 mg/L (Fish)

## 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

14.1	UN number	UN3066
14.2	UN proper shipping name	Paint
	Technical name	N/A
14.3	Transport hazard class(es)	8
	Subsidiary shipping hazard	N/A
14.4	Packing group	III
14.5	Environmental hazards	N/A
14.6	Special precautions for user	Unknown
	EmS-No.:	F-A, S-B
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Unknown

## 15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

### 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:

### CERCLA - Sara Hazard Category

Carcinogenicity, Acute Toxicity (any route of exposure), Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Specific target organ toxicity (single or repeated 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>	<u>%</u>
BARITE	13462-86-7	17.76

### 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>
BARITE	13462-86-7

**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>
BARITE	13462-86-7
FORMALDEHYDE POLYMER	26139-75-3

**CALIFORNIA PROPOSITION 65**

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

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

All chemical ingredients included on inventory (DSL)

**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:**

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H361D	Suspected of damaging the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**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.