



**Safety Data Sheet**  
**prepared to UN GHS Revision 3**

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

- 1.1 Product Identifier** 1347B1NL
- Product Name:** CARBOXANE 2100 FC PART B **Revision Date:** 07/21/2016
- 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:** Schlereth, Ken - 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

Flammable Liquid, category 3  
Corrosive to Metals, category 1  
Skin Corrosion, category 1  
Skin Sensitizer, category 1

**2.2 Label elements****Symbol(s) of Product****Signal Word**

Danger

**Named Chemicals on Label**

SILANE, REACTANT

**GHS HAZARD STATEMENTS**

Flammable Liquid, category 3	H226	Flammable liquid and vapour.
Corrosive to Metals, category 1	H290	May be corrosive to metals.
Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.

**GHS PRECAUTION PHRASES**

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P390	Absorb spillage to prevent material damage.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P406	Store in corrosive resistant/... container with a resistant inner liner.

**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>
PROPRIETARY	POLYSILOXANE	50-75
PROPRIETARY	REACTANT	10-25

PROPRIETARY	SILANE	10-25
TRADE SECRET	CATALYST	2.5-10
67-56-1	METHYL ALCOHOL	2.5-10
1760-24-3	SILANE	2.5-10
108-38-3	META-XYLENE	2.5-10
100-41-4	ETHYL BENZENE	1.0-2.5
106-42-3	PARA-XYLENE	1.0-2.5
108-88-3	TOLUENE	0.1-1.0

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
PROPRIETARY			0
PROPRIETARY	GHS05-GHS07	H302-314	0
PROPRIETARY	GHS05	H315-318	0
TRADE SECRET			0
67-56-1	GHS02-GHS06-GHS08	H225-301-311-331-370	0
1760-24-3	GHS05-GHS07	H317-318-332-412	0
108-38-3	GHS02-GHS07	H226-312-315-332	0
100-41-4	GHS02-GHS07	H225-332	0
106-42-3	GHS02-GHS07-GHS08	H226-312-315-332-335-371	0
108-88-3	GHS02-GHS07-GHS08	H225-315-319-336-361-373	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.

**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

Harmful if swallowed. Causes burns. Risk of serious damage to the lungs (by aspiration). Corrosive after repeated contact with skin and mucous membranes. Vapours may cause drowsiness and dizziness.

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

Immediate medical attention is required.

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

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Flammable liquid. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Provide adequate ventilation. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Electrical installations / working materials must comply with the technological safety standards. Wear shoes with conductive soles.

### 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. Cool containers / tanks with water spray. Flammable.

## 6. Accidental Release Measures

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

For personal protection see section 8. Ensure adequate ventilation. Evacuate personnel to safe areas. Evacuate personnel to safe areas. Remove all sources of ignition. 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.

### 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). 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 use sparking tools. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection.

**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)

Name	%	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL- TWA	OSHA PEL- CEILING	OEL Note
POLYSILOXANE	50-75	N/E	N/E	N/E	N/E	
REACTANT	10-25	NE	NE	NE	NE	
SILANE	10-25	N/E	N/E	N/E	N/E	
CATALYST	2.5-10	0.1 MGM3	0.2 MGM3	0.1 MGM3	NE	
METHYL ALCOHOL	2.5-10	200 PPM	250 PPM	260 MGM3	N/E	
SILANE	2.5-10	N/E	N/E	N/E	N/E	
META-XYLENE	2.5-10	100 PPM	150 PPM	435 MG/M3	N/E	
ETHYL BENZENE	1.0-2.5	20 PPM	N/E	435 MGM3	N/E	
PARA-XYLENE	1.0-2.5	100 PPM	150 PPM	435 MGM3	N/E	

TOLUENE 0.1-1.0 20 PPM N/E 375 MGM3 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:** 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.

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

**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>	Light Yellow To Clear Liquid
<b>Physical State</b>	Liquid
<b>Odor</b>	Slight
<b>Odor threshold</b>	N/D
<b>pH</b>	N/D
<b>Melting point / freezing point (°C)</b>	N/D
<b>Boiling point/range (°C)</b>	149 F (65 C) - 428 F (220 C)
<b>Flash Point, (°C)</b>	38
<b>Evaporation rate</b>	Slower Than Ether
<b>Flammability (solid, gas)</b>	Not determined
<b>Upper/lower flammability or explosive limits</b>	1.0 - 36.0
<b>Vapour Pressure, mmHg</b>	N/D
<b>Vapour density</b>	Heavier than Air
<b>Relative density</b>	Not determined
<b>Solubility in / Miscibility with water</b>	N/D
<b>Partition coefficient: n-octanol/water</b>	Not determined
<b>Auto-ignition temperature (°C)</b>	Not determined
<b>Decomposition temperature (°C)</b>	Not determined
<b>Viscosity</b>	Unknown
<b>Explosive properties</b>	Not determined
<b>Oxidising properties</b>	Not determined

**9.2 Other information**

VOC Content g/l:	90
Specific Gravity (g/cm3)	1.068

**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:** Unknown

**Sensitization:** Unknown

**Repeated dose toxicity:** Unknown

**Carcinogenicity:** Unknown

**Mutagenicity:** Unknown

**Toxicity for reproduction:** 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>
PROPRIETARY	POLYSILOXANE	>2000 mg/kg, oral, rat	Not Available	Not Available
PROPRIETARY	REACTANT	1505 mg/kg, oral, rat	4117 mg/kg, dermal	Not Available

PROPRIETARY	SILANE	Not Available	Not Available	Not Available
TRADE SECRET	CATALYST	2070 MG/KG, ORAL, RAT		NOT AVAILABLE
67-56-1	METHYL ALCOHOL	2080mg/kg rat oral	Not Available	Not Available
108-38-3	META-XYLENE	Not Available	Not Available	Not Available
100-41-4	ETHYL BENZENE	3500 mg/kg rat, oral	>5000 mg/l, dermal rabbit	17.2 mg/L Inh, Rat, 4Hr
106-42-3	PARA-XYLENE	Not Available	Not Available	Not Available
108-88-3	TOLUENE	5000 mg/kg rat oral	12267 mg/kg, dermal, rabbit	8000 ppm/4 hrs, rat, inhalation

**Additional Information:**

Harmful if swallowed. Causes burns. Risk of serious damage to the lungs (by aspiration). Corrosive after repeated contact with skin and mucous membranes. Vapours may cause drowsiness and dizziness.

## 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>
PROPRIETARY	POLYSILOXANE	No information	No information	No information
PROPRIETARY	REACTANT	331 mg/l (Daphnia)	1000 mg/l (Algae)	935 mg/l (Zebra Fish)
PROPRIETARY	SILANE	No information	No information	No information
TRADE SECRET	CATALYST	No information	No information	No information
67-56-1	METHYL ALCOHOL	No information	No information	No information
1760-24-3	SILANE	No information	No information	No information
108-38-3	META-XYLENE	No information	No information	No information
100-41-4	ETHYL BENZENE	1.8 mg/l (Daphnia Magna)	4.6 mg/l (Green Algae)	4.2 mg/l (Rainbow Trout)
106-42-3	PARA-XYLENE	No information	No information	No information
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	UN3469
14.2 UN proper shipping name	Paint, Flammable, Corrosive
Technical name	N/A
14.3 Transport hazard class(es)	3
Subsidiary shipping hazard	8
14.4 Packing group	III
14.5 Environmental hazards	Unknown
14.6 Special precautions for user	Unknown
EmS-No.:	F-E, S-C
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:**

#### 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:

Fire Hazard, Acute Health Hazard, 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:

<u>Chemical Name</u>	<u>CAS-No.</u>
METHYL ALCOHOL	67-56-1
META-XYLENE	108-38-3
ETHYL BENZENE	100-41-4
PARA-XYLENE	106-42-3
TOLUENE	108-88-3

##### 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:

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

#### 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.



No NJ Right-To-Know components exist in this product.

### Pennsylvania Right-To-Know

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

No PA Right-To-Know components exist in this product.

### California Proposition 65:

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

<u>Chemical Name</u>	<u>CAS-No.</u>
ETHYL BENZENE	100-41-4
BENZENE	71-43-2

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

<u>Chemical Name</u>	<u>CAS-No.</u>
METHYL ALCOHOL	67-56-1
TOLUENE	108-88-3
BENZENE	71-43-2

### 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:

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.
H370	Causes damage to organs.
H371	May cause damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

#### Reasons for revision

No Information

No Information