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 S501B1NL

Revision Date: 06/03/2026

Supercedes Date: 07/24/2023

Product Name: CARBOGUARD 501 PART B

1.2 Relevant identified uses of the substance or mixture and uses advised against Component of multicomponent industrial coatings - Industrial use. Advised against: others than recommended

1.3 Details of the supplier of the safety data sheet

Manufacturer:

Carboline Global Inc.
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 - regulatory@carboline.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

Hazardous to the aquatic environment, Chronic, category 2
Reproductive Toxicity, category 2
Skin Corrosion, category 1
Skin Sensitizer, category 1
STOT, repeated exposure, category 2

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

TETRAETHYLENEPENTAMINE, 2-PIPERAZIN-1-YLETHYLAMINE, 4-NONYL PHENOL, BRANCHED, METHYLENEOXIDE, POLYMER WITH BENZENAMINE HYDROGENATED

HAZARD STATEMENTS

Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Reproductive Toxicity, category 2	H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.

PRECAUTION PHRASES

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
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.
P391	Collect spillage.

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

Name According to EEC	EINEC No.	CAS-No.	%	Classifications

METHYLENEOXIDE, POLYMER WITH BENZENAMINE HYDROGENATED	603-894-6	135108-88-2	10 - <30	H302-312-314-373	Acute Tox. 4 Dermal, Acute Tox. 4 Oral, Skin Corr. 1, STOT RE 2
4-NONYL PHENOL, BRANCHED	284-325-5	84852-15-3	10 - <30	H302-314-361FD-400-410	Acute Tox. 4 Oral, Aquatic Acute 1, Aquatic Chronic 1, Repr. 2, Skin Corr. 1B
LIMESTONE	215-279-6	1317-65-3	5.0 - <10	H315-319	Eye Irrit. 2, Skin Irrit. 2
TETRAETHYLENEPENTAMINE	203-986-2	112-57-2	5.0 - <10	H302-312-314-317-411	Acute Tox. 4 Dermal, Acute Tox. 4 Oral, Aquatic Chronic 2, Skin Corr. 1, Skin Sens. 1
2-PIPERAZIN-1-YLETHYLAMINE	205-411-0	140-31-8	5.0 - <10	H302-312-314-317-412	Acute Tox. 4 Dermal, Acute Tox. 4 Oral, Aquatic Chronic 3, Skin Corr. 1, Skin Sens. 1
TRIS-2,4,6-(DIMETHYLAMINOMETHYL)PHENOL	202-013-9	90-72-2	1.0 - <5.0	H302-315-319	Acute Tox. 4 Oral, Eye Irrit. 2, Skin Irrit. 2
CARBON BLACK	215-609-9	1333-86-4	0.1 - <1.0		

CAS-No.	M-Factors
135108-88-2	
84852-15-3	
1317-65-3	
112-57-2	
140-31-8	
90-72-2	
1333-86-4	

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

Causes burns. May be harmful if swallowed. Corrosive after repeated contact with skin and mucous membranes.

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, 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. 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. Avoid breathing vapors, mist or gas. 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)

Name	CAS-No.	ACGIH TWA	ACGIH STEL	ACGIH Ceiling
METHYLENEOXIDE, POLYMER WITH BENZENAMINE HYDROGENATED	135108-88-2	N/E	N/E	N/E
4-NONYL PHENOL, BRANCHED	84852-15-3	N/E	N/E	N/E
LIMESTONE	1317-65-3	N/E	N/E	N/E
TETRAETHYLENEPENTAMINE	112-57-2	N/E	N/E	N/E
2-PIPERAZIN-1-YLETHYLAMINE	140-31-8	N/E	N/E	N/E
TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	90-72-2	N/E	N/E	N/E

CARBON BLACK	1333-86-4	3 MGM3	N/E	N/E

Name	CAS-No.	OSHA PEL	OSHA STEL
METHYLENEOXIDE, POLYMER WITH BENZENAMINE HYDROGENATED	135108-88-2	N/E	N/E
4-NONYL PHENOL, BRANCHED	84852-15-3	N/E	N/E
LIMESTONE	1317-65-3	5 MGM3 15 MGM3 5 MGM3 15 MGM3 5 MGM3 15 MGM3	N/E
TETRAETHYLENEPENTAMINE	112-57-2	N/E	N/E
2-PIPERAZIN-1-YLETHYLAMINE	140-31-8	N/E	N/E
TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	90-72-2	N/E	N/E
CARBON BLACK	1333-86-4	3.5 MGM3	N/E

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 listed in Section 2. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use MSHA/NIOSH approved organic vapor respirator. Follow all current OSHA requirements for respirator use. 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

Appearance:	Grey Viscous Liquid
Physical State	Liquid
Odor	Amine
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	256F (124C) - 431 F (222 C)
Flash Point (°C)	267F (130C)
Evaporation rate	Slower than Ether

Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	1.5 - 7.8
Vapour Pressure, mmHg	Not determined
Vapour density	Heavier than Air
Relative density	Not determined
Solubility in / Miscibility with water	Not Determined
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	Unknown
Explosive properties	Not determined
Oxidising properties	Not determined
Particle characteristics	Not applicable to liquids

9.2 Other information

VOC Content g/l:	0
Specific Gravity (g/cm3)	0.51

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 (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: No information on the product itself as the product is not tested

Inhalation LC50: No information on the product itself as the product is not tested

Irritation: Unknown

Corrosivity: Skin Corrosion, category 1

Sensitization: Skin Sensitizer, category 1

Repeated dose toxicity: Unknown

Carcinogenicity: Unknown

Mutagenicity: Unknown

Toxicity for reproduction: Reprodutive Toxicity, category 2

STOT-single exposure: Unknown

STOT-repeated exposure: Unknown

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:

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50	Gas LC50	Dust/Mist LC50
135108-88-2	METHYLENEOXIDE, POLYMER WITH BENZENAMINE HYDROGENATED	2000 mg/kg, oral, rat		Not Available	0.000	0.000
84852-15-3	4-NONYL PHENOL, BRANCHED	1620 mg/kg oral	No Information	No Information	No Information	No Information
1317-65-3	LIMESTONE	5,000 mg/kg, rat, oral	No Information	No Information	No Information	No Information
112-57-2	TETRAETHYLENEPENTAMINE	Not Available		Not Available	0.000	0.000
140-31-8	2-PIPERAZIN-1-YLETHYLAMINE	No Information	No Information	No Information	No Information	No Information
90-72-2	TRIS-2,4,6-(DIMETHYLAMINOMETHYL) PHENOL	1999 mg/kg (rat)	No Information	No Information	No Information	No Information
1333-86-4	CARBON BLACK	8000 mg/kg oral, rat	No Information	No Information	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 abestiform 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:

EC50 48hr (Daphnia):	Unknown
IC50 72hr (Algae):	Unknown
LC50 96hr (fish):	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

CAS-No.	Chemical Name	EC50 48hr	IC50 72hr	LC50 96hr
135108-88-2	METHYLENEOXIDE, POLYMER WITH BENZENAMINE HYDROGENATED	15.4 mg/l (Daphnia Magna)	43.9 mg/l (Algae)	63 mg/l Guppy (Poecilia reticulata)
84852-15-3	4-NONYL PHENOL, BRANCHED	No information	No information	No information
1317-65-3	LIMESTONE	1,000 mg/l	200 mg/l	10,000 mg/l
112-57-2	TETRAETHYLENEPENTAMINE	No information	No information	No information
140-31-8	2-PIPERAZIN-1-YLETHYLAMINE	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)
1333-86-4	CARBON BLACK	No information	No information	No information

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**	UN3267
14.2	**UN proper shipping name**	Corrosive Liquid, Basic, Organic, N.O.S.
	Technical name	Nonyl Phenol, Tetraethylenepentamine
14.3	**Transport hazard class(es)**	8
	Subsidiary shipping hazard	No Information
14.4	**Packing group**	III
14.5	**Environmental hazards**	Marine Pollutant: Yes (Nonyl Phenol)
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
	Additional Notes:	No Information

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

Reproductive toxicity, 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:

4-NONYL PHENOL, BRANCHED	84852-15-3	10.48

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.

Chemical Name	CAS-No.
TRADE SECRET	TRADE SECRET

Pennsylvania Right-To-Know

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

Chemical Name	CAS-No.
TRADE SECRET	TRADE SECRET
No Chemical Name Found	TRADE SECRET

CALIFORNIA PROPOSITION 65

WARNING: Cancer and Reproductive Harm -- 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:

H302	Harmful if swallowed.
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.
H361FD	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
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.